LG DT-S5855

MODEL

SERVICE MANUAL

SECTION 1

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PRODUCT SAFETY SERVICING GUIDELINES FOR VIDEO PRODUCTS

CAUTION : DO NOT ATTEMPT TO MODIFY THIS PRODUCT IN ANY WAY, NEVER PERFORM CUSTOMIZED INSTALLATIONS WITHOUT MANUFACTURER'S APPROVAL. UNAUTHORIZED MODIFICATIONS WILL NOT ONLY VOID THE WARRANTY, BUT MAY LEAD TO YOUR BEING LIABLE FOR ANY RESULTING PROPERTY DAMAGE OR USER INJURY.

SERVICE WORK SHOULD BE PERFORMED ONLY AFTER YOU ARE THOROUGHLY FAMILIAR WITH ALL OF THE FOLLOWING SAFETY CHECKS AND SERVICING GUIDELINES. TO DO OTHERWISE, INCREASES THE RISK OF POTENTIAL HAZARDS AND INJURY TO THE USER.

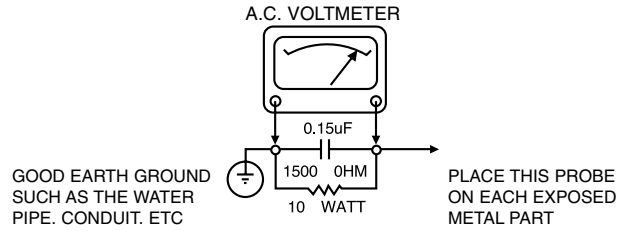
WHILE SERVICING, USE AN ISOLATION TRANSFORMER FOR PROTECTION FROM A.C. LINE SHOCK.

SAFETY CHECKS

AFTER THE ORIGINAL SERVICE PROBLEM HAS BEEN CORRCTED. A CHECK SHOULD BE MADE OF THE FOLLOWING.

SUBJECT : FIRE & SHOCK HAZARD

1. BE SURE THAT ALL COMPONENTS ARE POSITIONED IN SUCH A WAY AS TO AVOID POSSIBILITY OF ADJACENT COMPONENT SHORTS. THIS IS ESPECIALLY IMPORTANT ON THOSE MODULES WHICH ARE TRANSPORTED TO AND FROM THE REPAIR SHOP.
2. NEVER RELEASE A REPAIR UNLESS ALL PROTECTIVE DEVICES SUCH AS INSULATORS, BARRIERS, COVERS, SHIELDS, STRAIN RELIEFS, POWER SUPPLY CORDS, AND OTHER HARDWARE HAVE BEEN REINSTALLED PER ORIGINAL DESIGN. BE SURE THAT THE SAFETY PURPOSE OF THE POLARIZED LINE PLUG HAS NOT BEEN DEFEATED.
3. SOLDERING MUST BE INSPECTED TO DISCOVER POSSIBLE COLD SOLDER JOINTS, SOLDER SPLASHES OR SHARP SOLDER POINTS. BE CERTAIN TO REMOVE ALL LOOSE FOREIGN PARTICLES.
4. CHECK FOR PHYSICAL EVIDENCE OF DAMAGE OR DETERIORATION TO PARTS AND COMPONENTS. FOR FRAYED LEADS, DAMAGED INSULATION (INCLUDING A.C. CORD). AND REPLACE IF NECESSARY FOLLOW ORIGINAL LAYOUT, LEAD LENGTH AND DRESS.
5. NO LEAD OR COMPONENT SHOULD TOUCH A RECIVING TUBE OR A RESISTOR RATED AT 1 WATT OR MORE. LEAD TENSION AROUND PROTRUNING METAL SURFACES MUST BE AVOIDED.
6. ALL CRITICAL COMPONENTS SUCH AS FUSES, FLAMEPROOF RESISTORS, CAPACITORS, ETC. MUST BE REPLACED WITH EXACT FACTORY TYPES, DO NOT USE REPLACEMENT COMPONENTS OTHER THAN THOSE SPECIFIED OR MAKE UNRECOMMENDED CIRCUIT MODIFICATIONS.
7. AFTER RE-ASSEMBLY OF THE SET ALWAYS PERFORM AN A.C. LEAKAGE TEST ON ALL EXPOSED METALLIC PARTS OF THE CABINET, (THE CHANNEL SELECTOR KNOB, ANTENNA TERMINALS. HANDLE AND SCREWS) TO BE SURE THE SET IS SAFE TO OPERATE WITHOUT DANGER OF ELECTRICAL SHOCK. DO NOT USE A LINE ISOLATION TRANSFORMER DURING THIS TEST USE AN A.C. VOLTMETER, HAVING 5000 OHMS PER VOLT OR MORE SENSITIVITY, IN THE FOLLOWING MANNER; CONNECT A 1500 OHM 10 WATT RESISTOR, PARALLELED BY A .15 MFD. 150.V A.C TYPE CAPACITOR BETWEEN A KNOWN GOOD EARTH GROUND (WATER PIPE, CONDUIT, ETC.) AND THE EXPOSED METALLIC PARTS, ONE AT A TIME. MEASURE THE A.C. VOLTAGE ACROSS THE COMBINATION OF 1500 OHM RESISTOR AND .15 MFD CAPACITOR. REVERSE THE A.C. PLUG AND REPEAT A.C. VOLTAGE MEASUREMENTS FOR EACH EXPOSED METALLIC PART. VOLTAGE MEASURED MUST NOT EXCEED 75 VOLTS R.M.S. THIS CORRESPONDS TO 0.5 MILLIAMP A.C ANY VALUE EXCEEDING THIS LIMIT CONSTITUTES A POTENTIAL SHOCK HAZARD AND MUST BE CORRECTED IMMEDIATELY.


A.C. VOLTMETER
0.15uF
1500 0HM
10 WATT
GOOD EARTH GROUND SUCH AS THE WATER PIPE. CONDUIT. ETC
PLACE THIS PROBE ON EACH EXPOSED METAL PART

SUBJECT: GRAPHIC SYMBOLS

THE LIGHTNING FLASH WITH APROWHEAD SYMBOL. WITHIN AN EQUILATERAL TRIANGLE, IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF UNINSULATED "DANGEROUS VOLTAGE" THAT MAY BE OF SUFFICIENT MAGNITUDE TO CONSTITUTE A RISK OF ELECTRIC SHOCK.

THE EXCLAMATION POINT WITHIN AN EQUILATERAL TRIANGLE IS INTENDED TO ALERT THE SERVICE PERSONNEL TO THE PRESENCE OF IMPORTANT SAFETY INFORMATION IN SERVICE LITERATURE.

SUBJECT : X-RADIATION

1. BE SURE PROCEDURES AND INSTRUCTIONS TO ALL SERVICE PERSONNEL COVER THE SUBJECT OF X-RADIATION. THE ONLY POTENTIAL SOURCE OF X-RAYS IN CURRENT T.V. RECEIVERS IS THE PICTURE TUBE. HOWEVER, THIS TUBE DOES NOT EMIT X-RAYS WHEN THE HIGH VOLTAGE IS AT THE FACTORY SPECIFIED LEVEL. THE PROPER VALUE IS GIVEN IN THE APPLICABLE SCHEMATIC. OPERATION AT HIGHER VOLTAGES MAY CAUSE A FAILURE OF THE PICTURE TUBE OR HIGH VOLTAGE SUPPLY AND, UNDER CERTAIN CIRCUMSTANCES, MAY PRODUCE RADIATION IN EXCESS OF DESIRABLE LEVELS.
2. ONLY FACTORY SPECIFIED C.R.T. ANODE CONNECTORS MUST BE USED. DEGAUSSING SHIELDS ALSO SERVE AS X-RAY SHIELD IN COLOR SETS, ALWAYS RE-INSTALL THEM.
3. IT IS ESSNTIAL THAT SERVICE PERSONNEL HAVE AVAILABLE AN ACCURATE AND RELIABLE HIGH VOLTAGE METER. THE CALIBRA TION OF THE METER SHOULD BE CHECKED PERIODICALLY AGAINST A REFERENCE STANDARD, SUCH AS THE ONE AVAILABLE AT YOUR DISTRIBUTOR.
4. WHEN THE HIGH VOLTAGE CIRCUITRY IS OPERATING PROPERLY THERE IS NO POSSIBILITY OF AN X-RADIATION PROBLEM. EVERY TIME A COLOR CHASSIS IS SERVICED. THE BRIGHTNESS SHOULD BE RUN UP AND DOWN WHILE MONITORING THE HIGH VOLTAGE WITH A METER TO BE CERTAIN THAT THE HIGH VOLTAGE DOES NOT EXCEED THE SPECIFIED VALUE AND THAT IT IS REGULATING CORRECTLY, WE SUGGEST THAT YOU AND YOUR SERVICE ORGANIZATION REVIEW TEST PROCEDURES SO THAT VOLTAGE REGULATION IS ALWAYS CHECKED AS A STANDARD SERVICING PROCEDURE. AND THAT THE HIGH VOLTAGE READING BE RECORDER ON EACH CUSTOMER'S INVOICE.
5. WHEN TROUBLESHOOTING AND MAKING TEST MEASUREMENTS IN A PRODUCT WITH A PROBLEM OF EXCESSIVE HIGH VOLTAGE, AVOID BEING UNNECESSARILY CLOSE TO THE PICTURE TUBE AND THE HIGH VOLTAGE SUPPLY. DO NOT OPERATE THE PRODUCT LONGER THAN IS NECESSARY TO LOCATE THE CAUSE OF EXCES SIVE VOLTAGE.
6. REFER TO HV. B+ AND SHUTDOWN ADJUSTMENT PROCEDURES DESCRIBED IN THE APPROPRIATE SCHEMATIC AND DIAGRAMS (WHERE USED).

SUBJECT: IMPLOSION

1. ALL DIRECT VIEWED PICTURE TUBES ARE EQUIPPED WITH AN INTE GRAL IMPLOSION PROTECTION SYSTEM, BUT CARE SHOULD BE TAKEN TO AVOID DAMAGE DURING INSTALLATION, AVOID SCRATCHING THE TUBE. IF SCRATCHED REPLACE IT.
2. USE ONLY RECOMMENDED FACTORY REPLACEMENT TUBES.

SUBJECT : TIPS ON PROPER INSTALLATION

1. NEVER INSTALL ANY PRODUCT IN A CLOSED-IN RECESS, CUBBYHOLE OR CLOSELY FITTING SHELF SPACE. OVER OR CLOSE TO HEAT DUCT, OR IN THE PATH OF HEATED AIR FLOW.
2. AVOID CONDITIONS OF HIGH HUMIDITY SUCH AS: OUTDOOR PATIO INSTALLATIONS WHERE DEW IS A FACTOR, NEAR STEAM RADIATORS WHERE STEAM LEAKAGE IS A FACTOR, ETC.
3. AVOID PALCEMENT WHERE DRAPERIES MAY OBSTRUCT REAR VENTING. THE CUSTOMER SHOULD ALSO AVOID THE USE OF DECORATIVE SCARVES OR OTHER COVERINGS WHICH MIGHT OBSTRUCT VENTILATION.
4. WALL AND SHELF MOUNTED INSTALLATIONS USING A COMMERCIAL MOUNTING KIT. MUST FOLLOW THE FACTORY APPROVED MOUNTING INSTRUCTIONS A PRODUCT MOUNTED TO A SHELF OR PLATFORM MUST RETAIN ITS ORIGINAL FEET (OR THE EQUIVALENT THICKNESS IN SPACERS) TO PROVIDE ADEQUATE AIR FLOW ACROSS THE BOTTOM, BOLTS OR SCREWS USED FOR FASTENERS MUST NOT TOUCH ANY PARTS OR WIRING. PERFORM LEAKAGE TEST ON CUSTOMIZED INSTALLATIONS.
5. CAUTION CUSTOMERS AGAINST THE MOUNTING OF A PRODUCT ON SLOPING SHELF OR A TILTED POSITION, UNLESS THE PRODUCT IS PROPERLY SECURED.
6. A PRODUCT ON A ROLL-ABOUT CART SHOULD BE STABLE ON ITS MOUNTING TO THE CART. CAUTION THE CUSTOMER ON THE HAZARDS OF TRYING TO ROLL A CART WITH SMALL CASTERS ACROSS THRESHOLDS OR DEEP PILE CARPETS.
7. CAUTION CUSTOMERS AGAINST THE USE OF A CART OR STAND WHICH HAS NOT BEEN LISTED BY UNDERWRITERS LABORATORIES, INC. FOR USE WITH THEIR SPECIFIC MODEL OF TELEVISION RECEIVER OR GENERICALLY APPROVED FOR USE WITH T.V.'S OF THE SAME OR LARGER SCREEN SIZE.
8. CAUTION CUSTOMERS AGAINST THE USE OF EXTENSION CORDS, EXPLAIN THAT A FOREST OF EXTENSIONS SPROUTING FROM A SINGLE OUTLET CAN LEAD TO DISASTROUS CONSEQUENCES TO HOME AND FAMILY.

SERVICING PRECAUTIONS

CAUTION : Before servicing the COMBI HOME THEATER SYSTEM covered by this service data and its supplements and addends, read and follow the *SAFETY PRECAUTIONS. NOTE* : if unforeseen circumstances create conflict between the following servicing precautions and any of the safety precautions in this publications, always follow the safety precautions.
Remembers Safety First:

General Servicing Precautions

1. Always unplug the COMBI HOME THEATER SYSTEM AC power cord from the AC power source before:
   (1) Removing or reinstalling any component, circuit board, module, or any other assembly.
   (2) Disconnection or reconnecting any internal electrical plug or other electrical connection.
   (3) Connecting a test substitute in parallel with an electrolytic capacitor.
   Caution : A wrong part substitution or incorrect polarity installation of electrolytic capacitors may result in an explosion hazard.

2. Do not spray chemicals on or near this COMBI HOME THEATER SYSTEM or any of its assemblies.

3. Unless specified otherwise in this service data, clean electrical contacts by applying an appropriate contact cleaning solution to the contacts with a pipe cleaner, cotton-tipped swab, or comparable soft applicator.
   Unless specified otherwise in this service data, lubrication of contacts is not required.

4. Do not defeat any plug/socket B+ voltage interlocks with whitch instruments covered by this service manual might be equipped.

5. Do not apply AC power to this COMBI HOME THEATER SYSTEM and/or any of its electrical assemblies unless all solid-state device heat sinks are cerrectly installed.

6. Always connect test instrument ground lead to the appropriate ground before connection the test instrument positive lead. Always remove the test instrument ground lead last.

Insulation Checking Procedure

Disconnect the attachment plug from the AC outlet and turn the power on. Connect an insulation resistance meter(500V) to the blades of the attachment plug. The insulation resistance between each blade of the attachment plug and accessible conductive parts (Note 1) should be more than 1M-ohm.
Note 1 : Accessible Conductive Parts including Metal panels, Input terminals, Earphone jacks, etc.

Electrostatically Sensitive (ES) Devices

Some semiconductor (solid state) devices can be damaged easily by static electricity. Such components commonly are called Electrostatically Sensitive (ES) Devices. Examples of typical ES devices are integrated circuits and some field effect transistors and semiconductor chip components.
The following techniques should be used to help reduce the incidence of component damage caused by static electricity.

1. Immediately before handling any semiconductor component or semiconductor-equipped assembly, drain off any electrostatic charge on your body by touching a known earth ground. Alternatively, obtain and wear a commercially available discharging wrist strap device, which should be removed for potential shock reasons prior to applying power to the unit under test.

2. After removing an electrical assembly equipped with ES devices, place the assembly on a conductive surface such as aluminum foil, to prevent electrostatic charge buildup or exposure of the assembly.

3. Use only a grouned-tip soldering iron to solder or unsolder ES devices.

4. Use only an anti-static solder removal device. Some solder removal devices not classified a “anti-static” can generate electrical charges sufficient to damage ES devices.

5. Do not use freon-propelled chemicals. These can generate electrical charge sufficient to damage ES devices.

6. Do not remove a replacement ES device from its protec tive package until immediately before you are ready to install it. (Most replacement ES devices are packaged with leads electrically shorted together by conductive foam, aluminum foil, or comparable conductive material).

7. Immediately before removing the protective material from the leads of a replacement ES device, touch the protective material to the chassis or circuit assembly into which the device will be installed.

   Caution : Be sure no power is applied to the chassis or circuit, and observe all other safety precautions.

8. Minimize bodily motions when handling unpackaged replacement ES devices. (Normally harmless motion such as the brushing together of your clothes fabric or the lifting of your foot from a carpeted floor can generate static electricity sufficient to damage an ES device.)

SECTION 2

CABINET & MAIN CHASSIS

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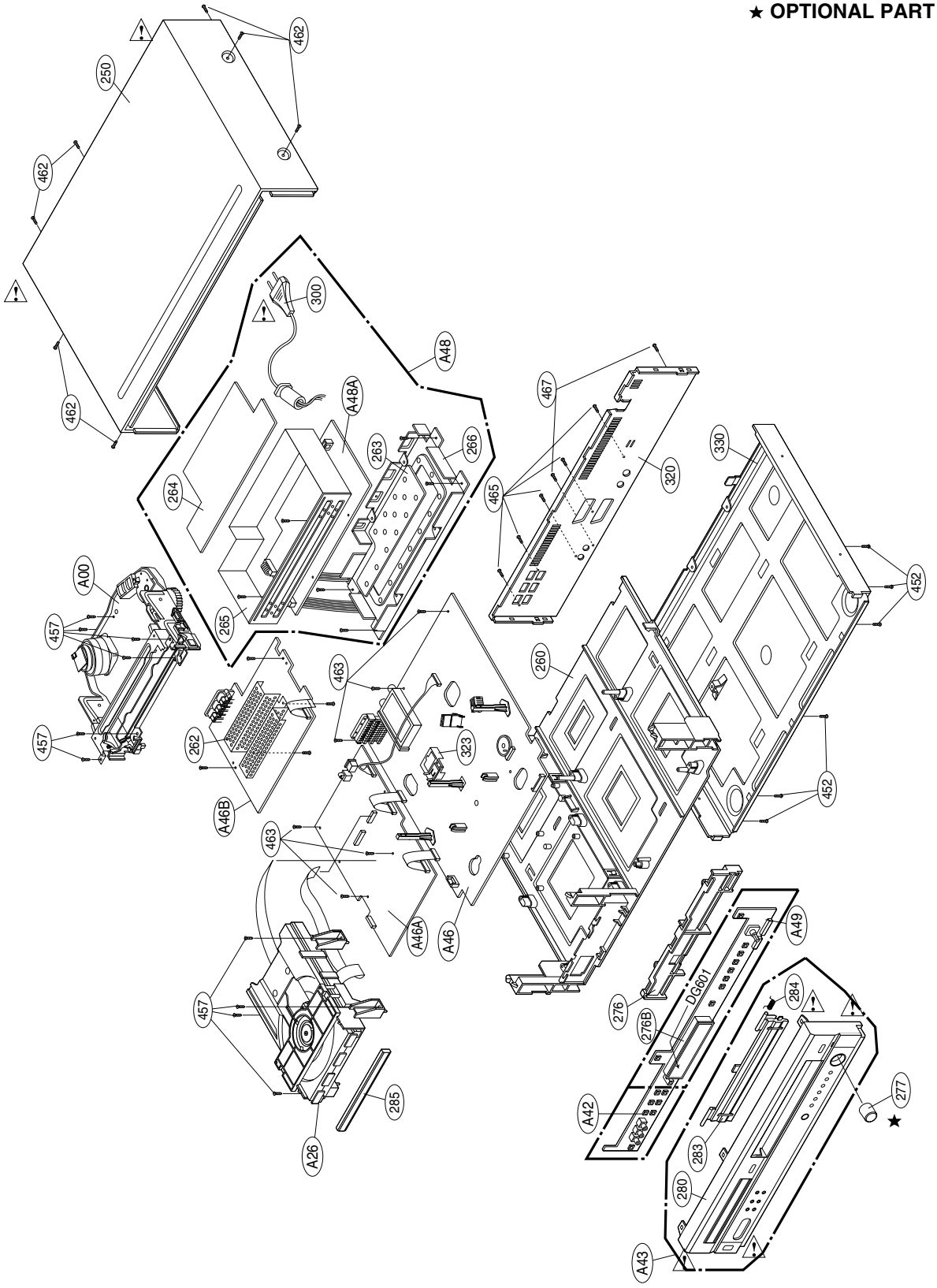
EXPLODED VIEWS

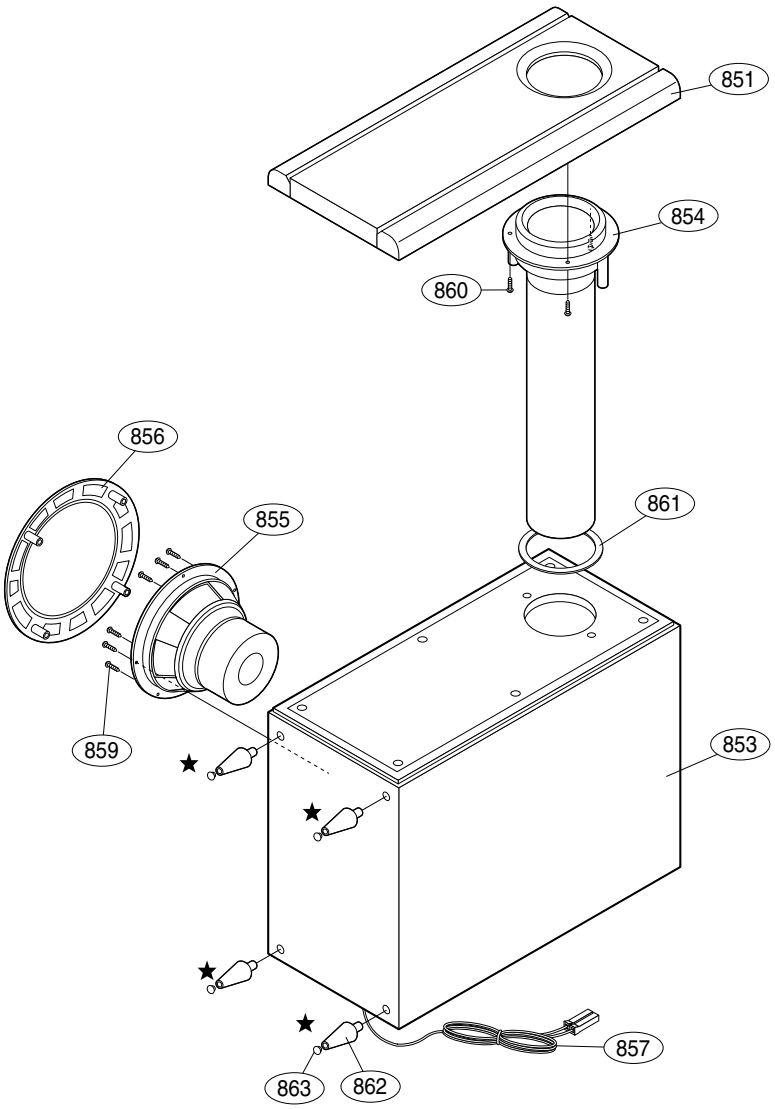
1. Cabinet and Main Frame Section

★ OPTIONAL PART

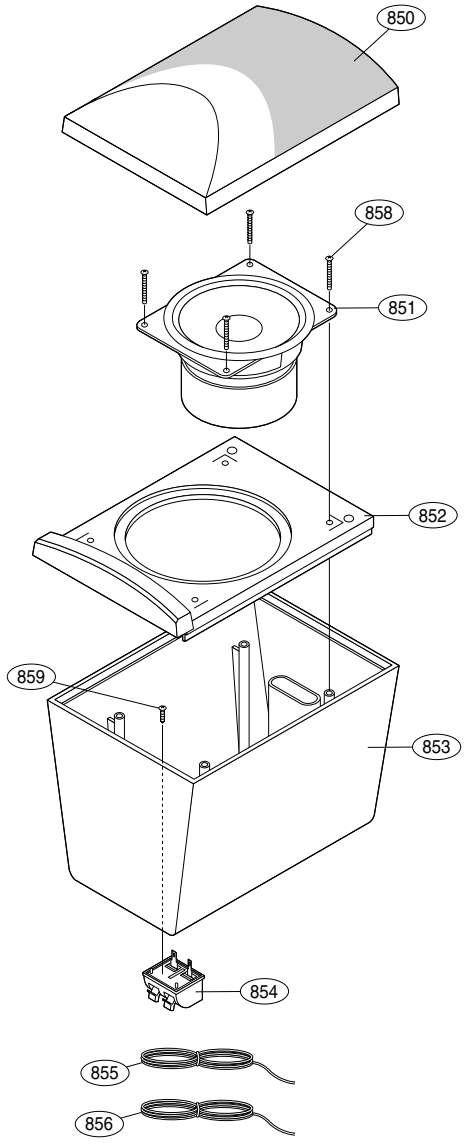


2. Woofer Speaker Section (DTE-550WE)

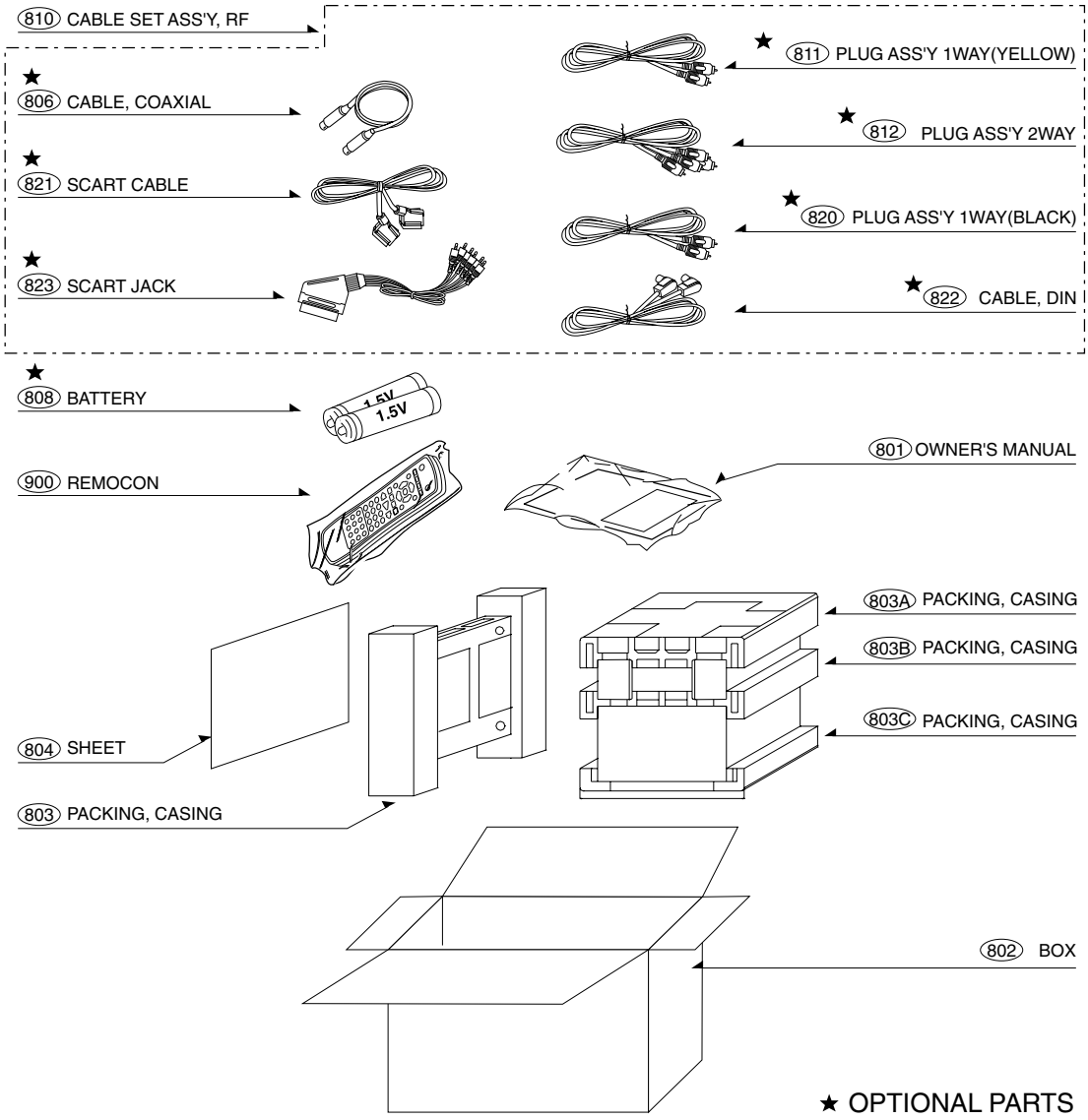
★ OPTIONAL PART



3. Speaker Section (DTE-530TE)



4. Packing Accessory Section



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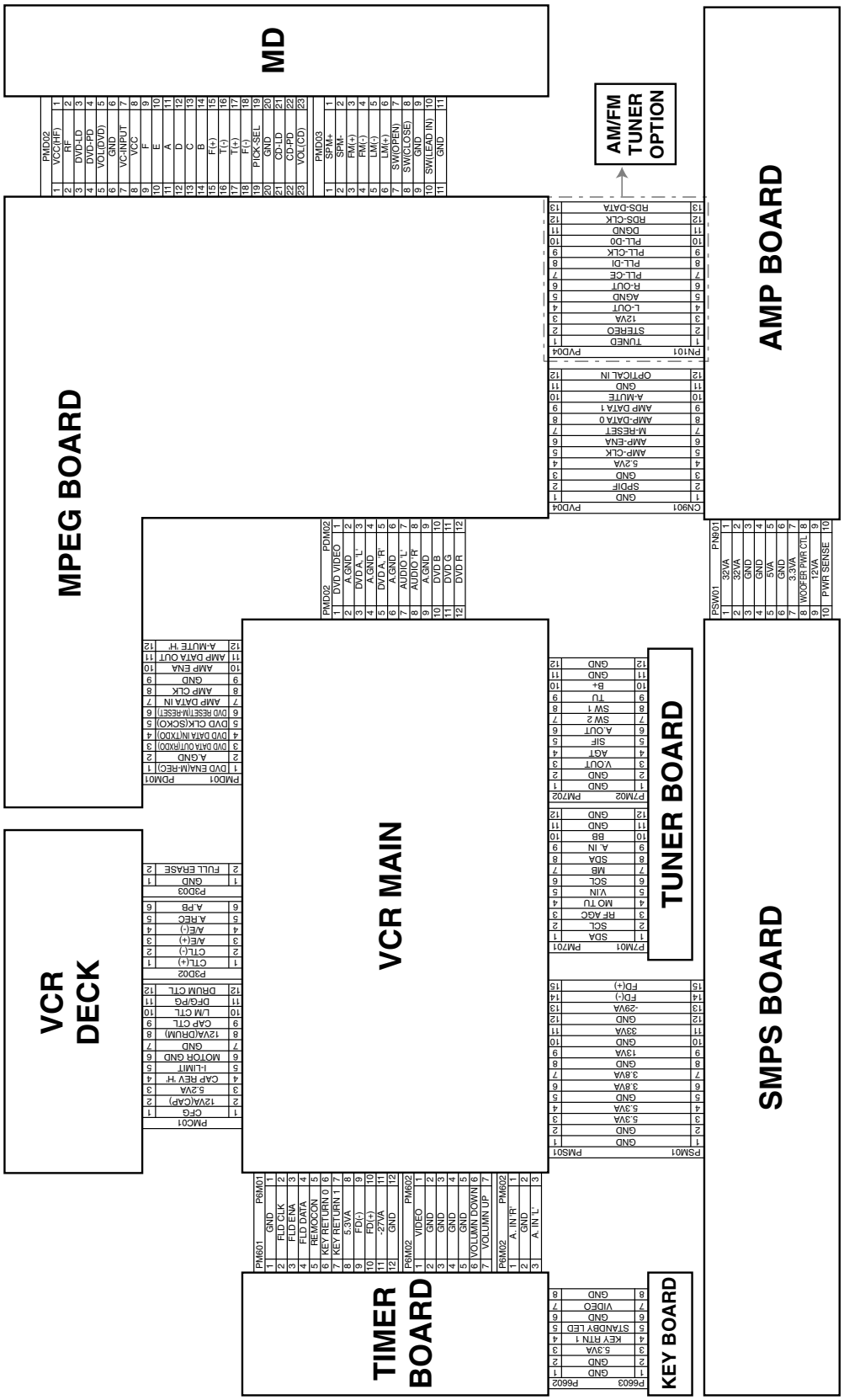
OVERALL WIRING DIAGRAM



VCR PART
ELECTRICAL ADJUSTMENT PROCEDURES

1. Servo Adjustment

1) PG Adjustment

• Test Equipment

a) OSCILLOSCOPE	C) PAL MODEL : PAL SP TEST TAPE
b) NTSC MODEL : NTSC SP TEST TAPE	

• Adjustment And Specification

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(W373, W374)	R/C TRK JIG KEY	6.5 ± 0.5H

• Adjustment Procedure

a) Insert the SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the “ATR” is blink after the SP Test Tape is inserted.

b) Connect the CH1 of the oscilloscope to the H/SW(W373, W374) and CH2 to the Video Out for the VCR.

c) Trigger the mixed Combo Video Signal of CH2 to the CH1 H/SW(W373, W374), and then check the distance (time difference), which is from the selected A(B) Head point of the H/SW(W373, W374) signal to the starting point of the vertical synchronized signal, to 6.5H ± 0.5H (416μs, 1H=64μs).

• PG Adjustment Method

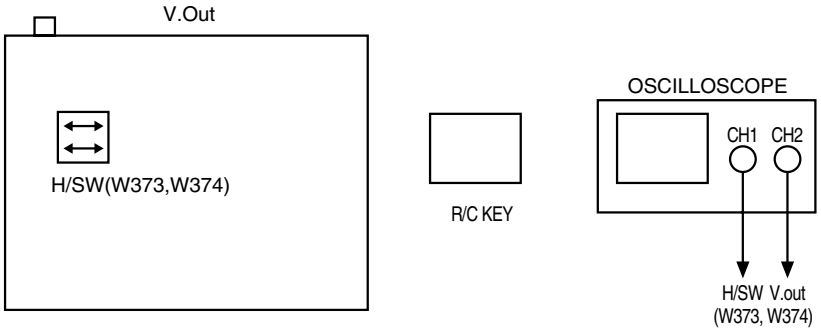
a-1) Payback the SP standard tape

b-2) Press the “1” key on the Remote controller and the “PLAY” key on the Front Panel the same time, then it goes in to Tracking initial mode. (Note : PAL Model “1” key on Remote controller)

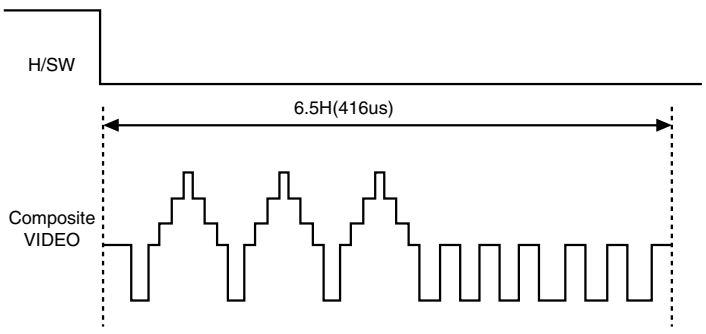
c-3) Repeat the above step(No.b-2), then it finishes the PG adjusting automatically.

d-4) Stop the playback, then it goes out to PG adjusting mode after mony the PG data.

• CONNECTION



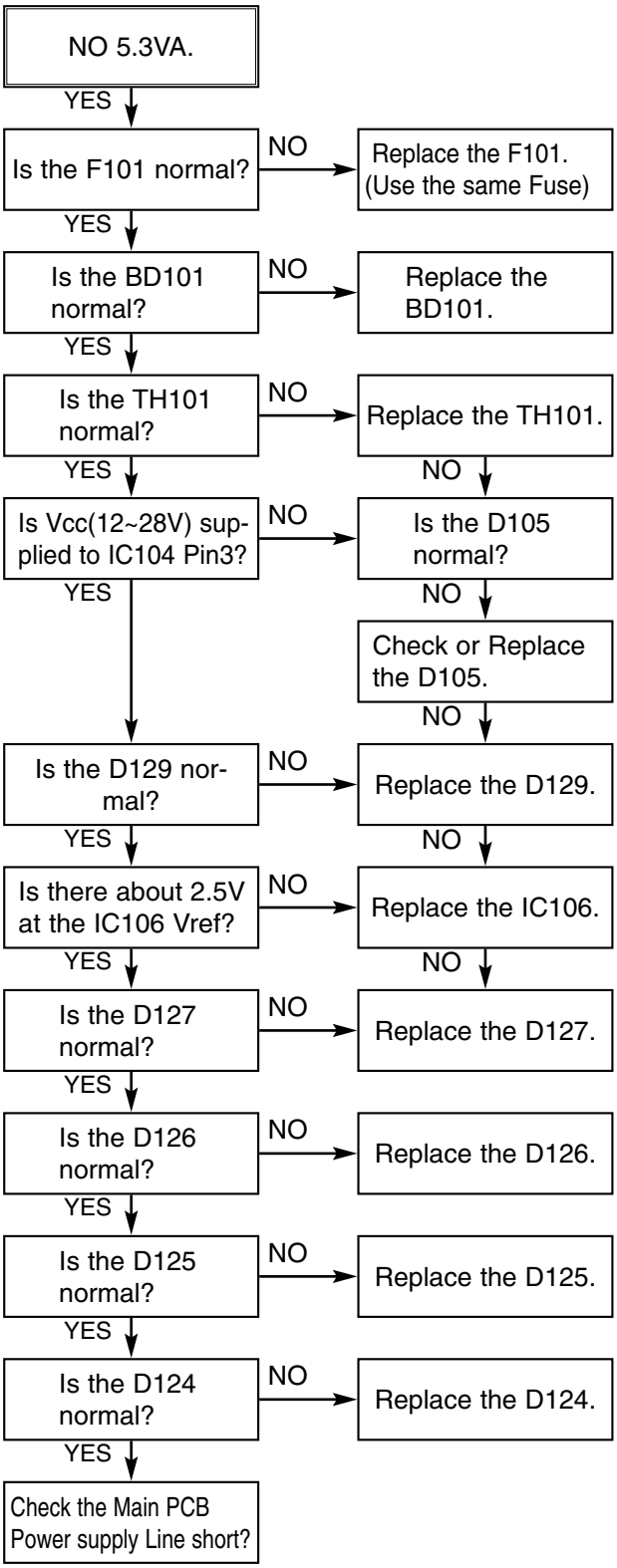
• WAVEFORM



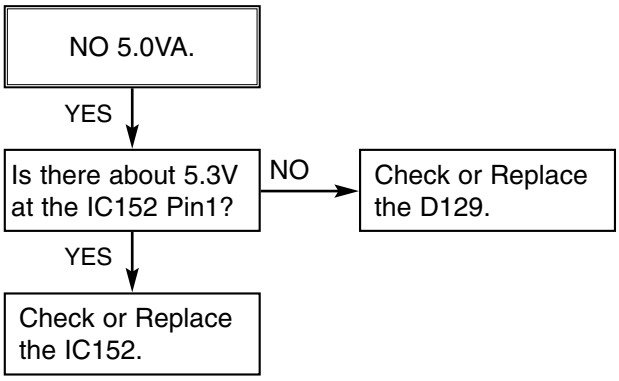
ELECTRICAL TROUBLESHOOTING GUIDE

1. Power(SMPS) CIRCUIT

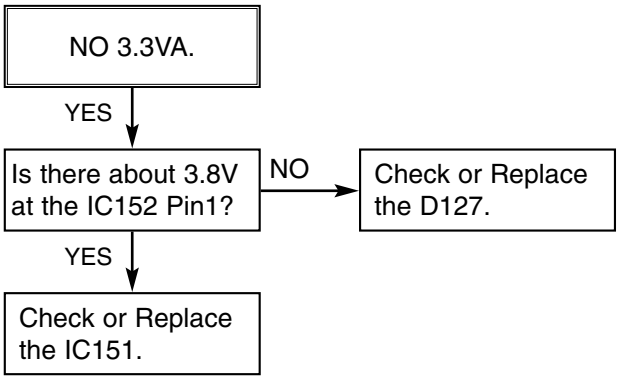
(1) No 5.3VA (SYS/Hi-Fi/TUNER)



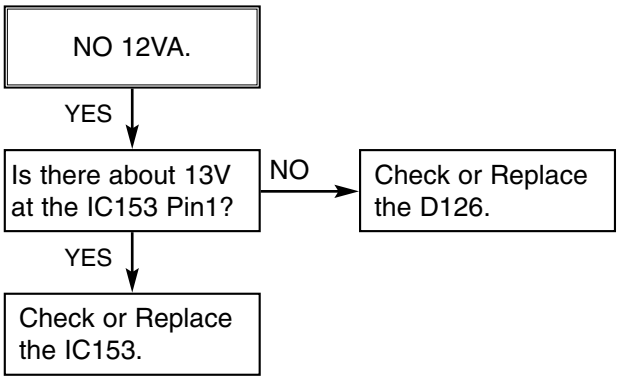
(2) No 5.0VA



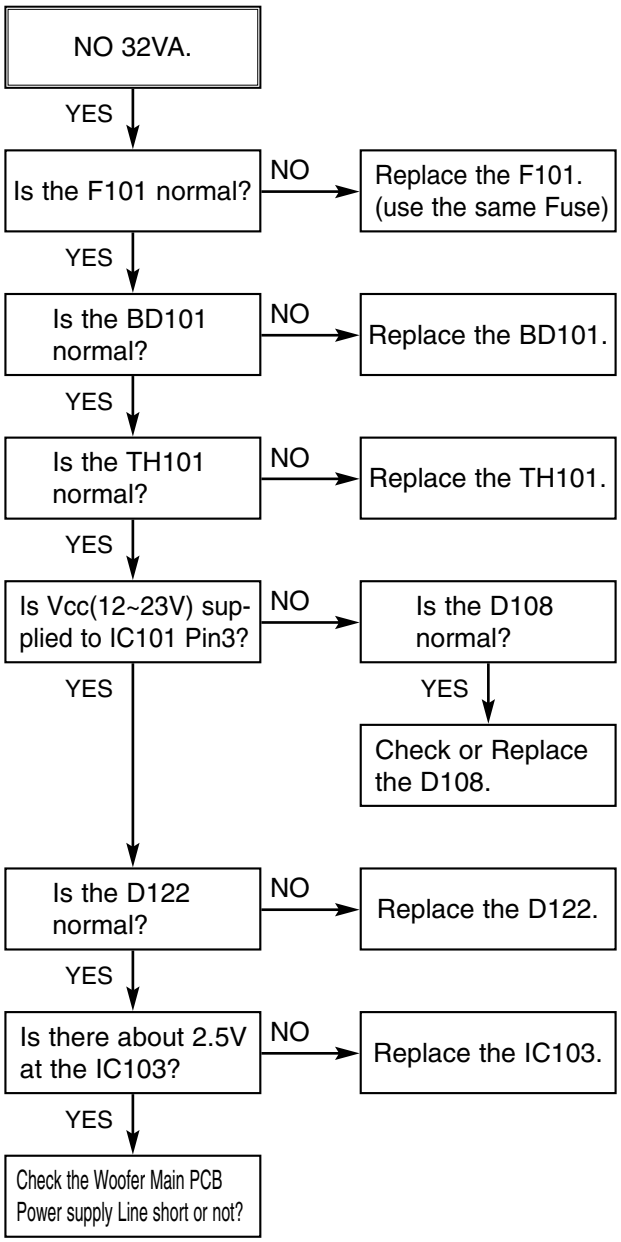
(3) No 3.3VA



(4) No 12VA

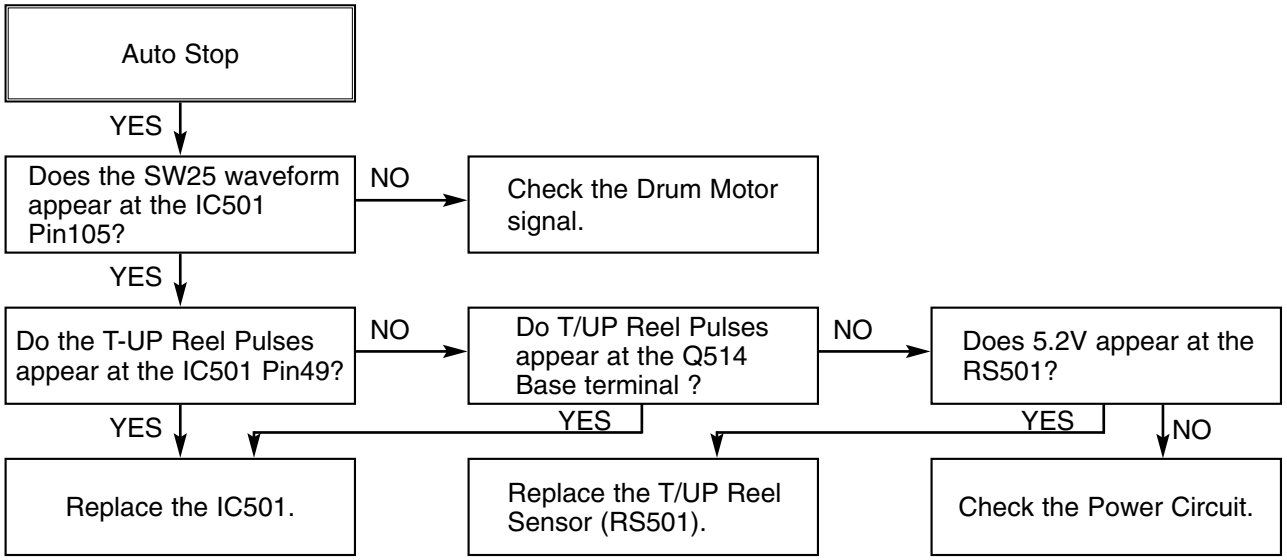


(5) No 32VA

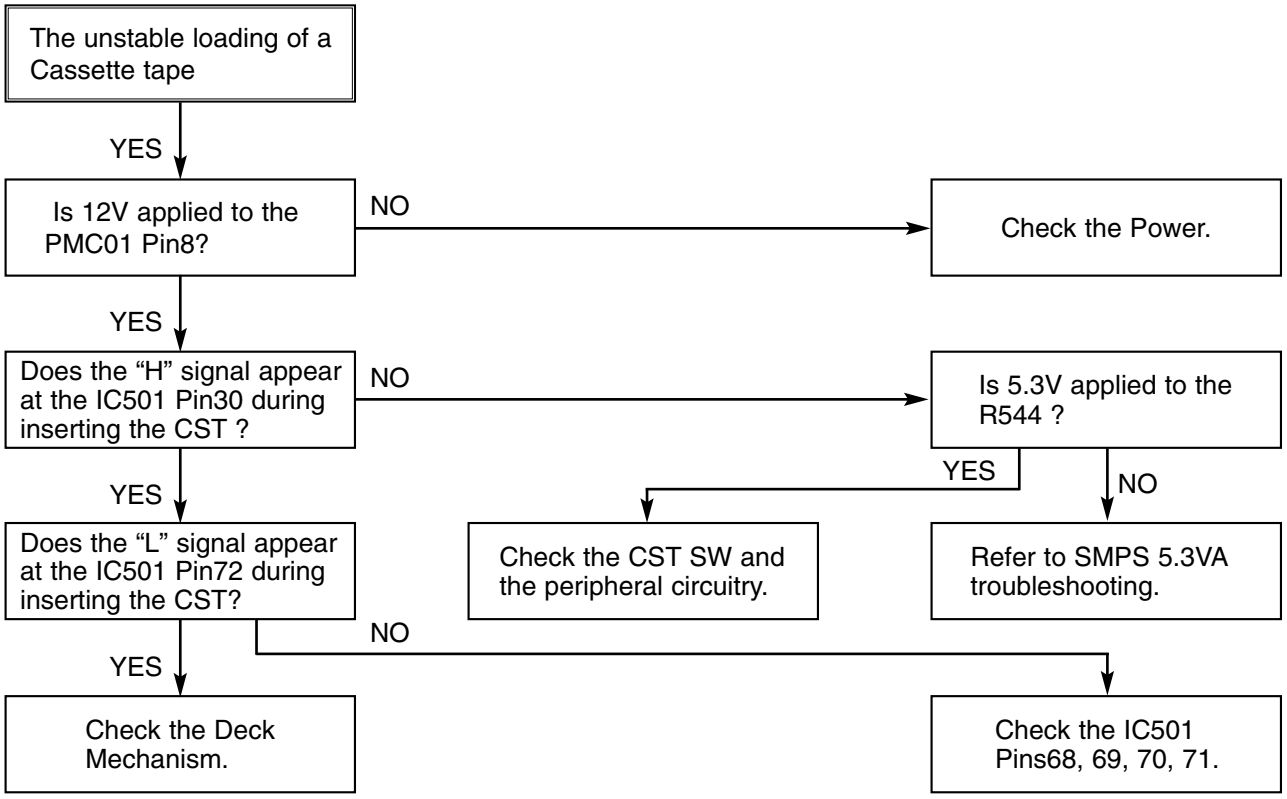

NO 32VA.
YES
Is the F101 normal?
NO
Replace the F101.
(use the same Fuse)
YES
Is the BD101 normal?
NO
Replace the BD101.
YES
Is the TH101 normal?
NO
Replace the TH101.
YES
Is Vcc(12~23V) supplied to IC101 Pin3?
NO
Is the D108 normal?
YES
Check or Replace the D108.
YES
Is the D122 normal?
NO
Replace the D122.
YES
Is there about 2.5V at the IC103?
NO
Replace the IC103.
YES
Check the Woofer Main PCB Power supply Line short or not?

2. SYSTEM/KEY CIRCUIT

(1) AUTO STOP



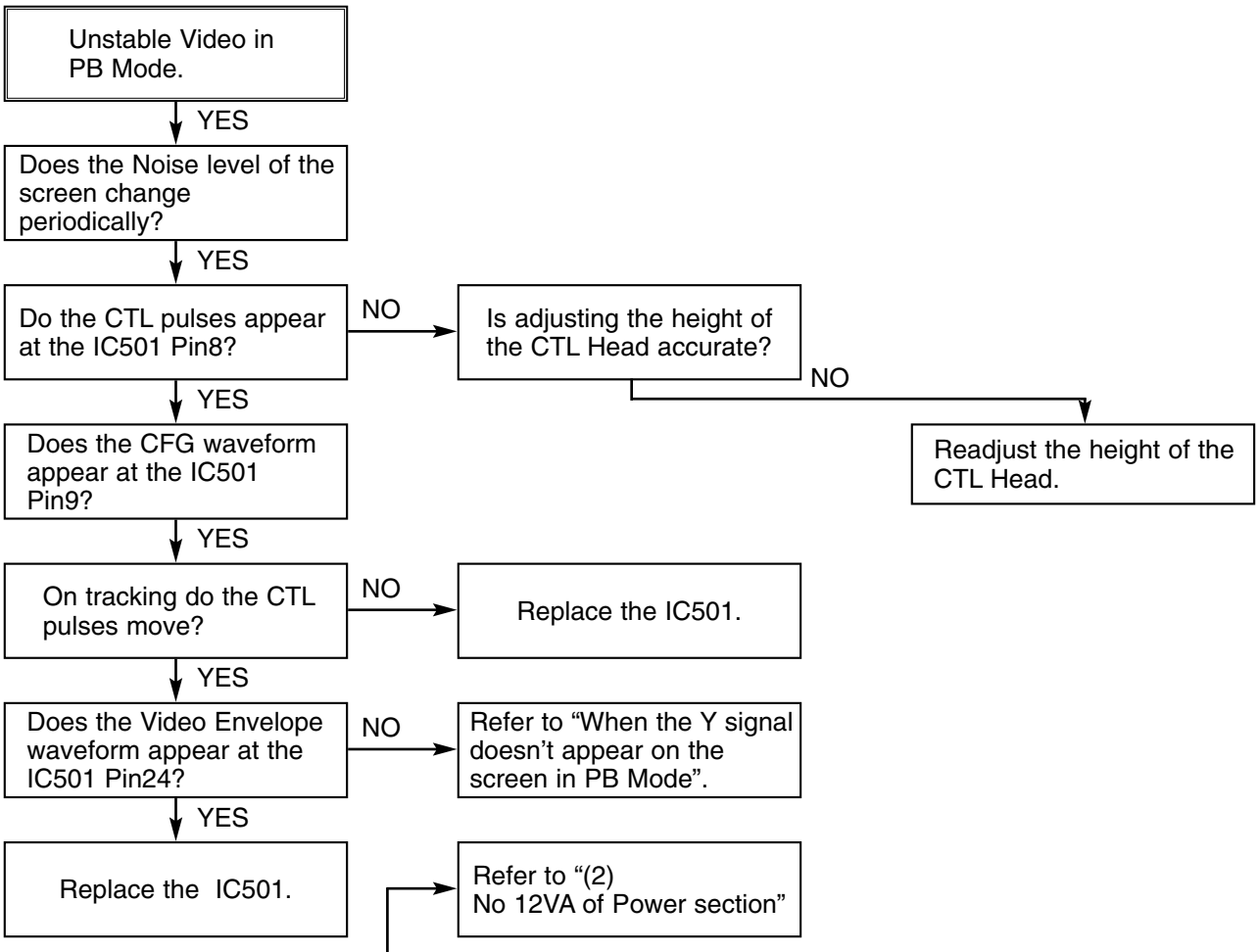
(2) The unstable loading of a Cassette tape


The unstable loading of a Cassette tape
YES
Is 12V applied to the PMC01 Pin8?
NO
Check the Power.
YES
Does the “H” signal appear at the IC501 Pin30 during inserting the CST ?
NO
Is 5.3V applied to the R544 ?
YES
NO
YES
Does the “L” signal appear at the IC501 Pin72 during inserting the CST?
Check the CST SW and the peripheral circuitry.
Refer to SMPS 5.3VA troubleshooting.
NO
YES
Check the Deck Mechanism.
Check the IC501 Pins68, 69, 70, 71.

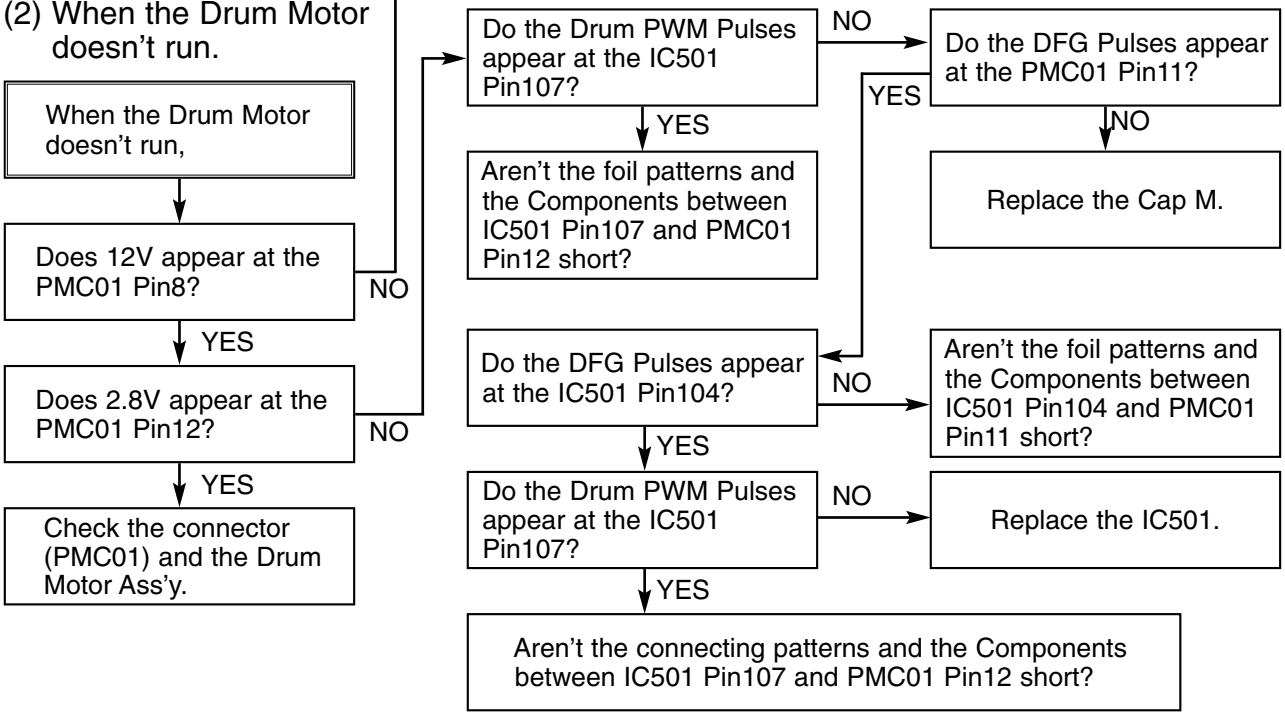
Caution : Auto stop can occur because Grease or Oil is dried up

3. SERVO CIRCUIT

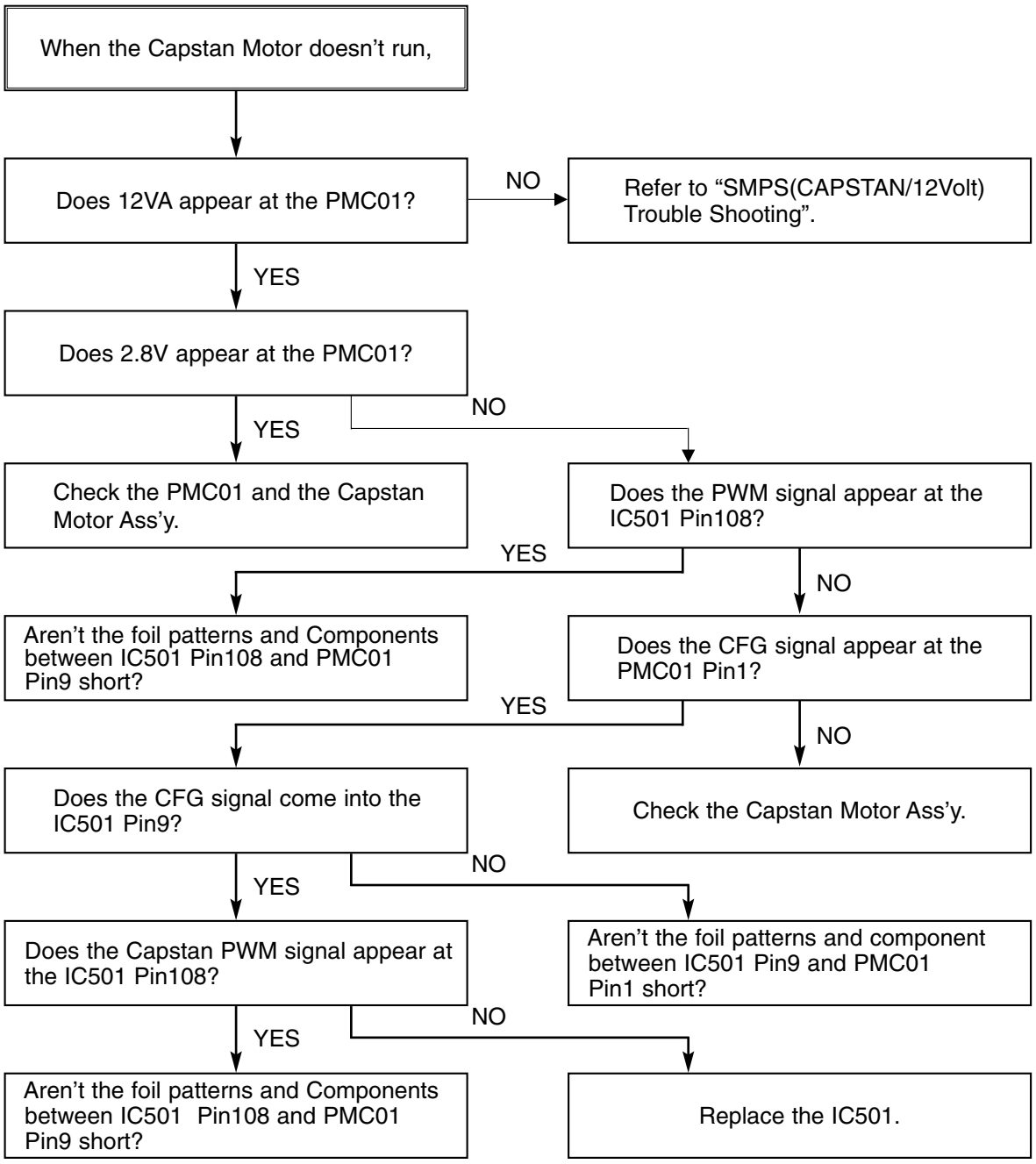
(1) Unstable Video in PB MODE


Unstable Video in PB Mode.
YES
Does the Noise level of the screen change periodically?
YES
Do the CTL pulses appear at the IC501 Pin8?
NO
Is adjusting the height of the CTL Head accurate?
NO
Readjust the height of the CTL Head.
YES
Does the CFG waveform appear at the IC501 Pin9?
YES
On tracking do the CTL pulses move?
NO
Replace the IC501.
YES
Does the Video Envelope waveform appear at the IC501 Pin24?
NO
Refer to "When the Y signal doesn't appear on the screen in PB Mode".
YES
Replace the IC501.

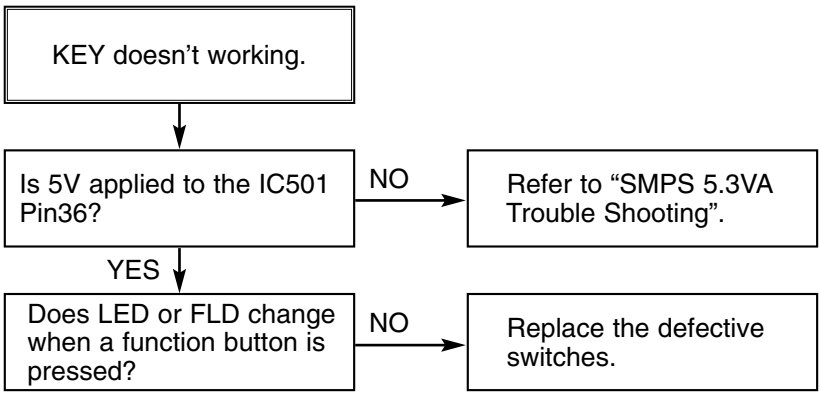
(2) When the Drum Motor doesn't run.


When the Drum Motor doesn't run,
Does 12V appear at the PMC01 Pin8?
NO
Refer to "(2) No 12VA of Power section"
YES
Does 2.8V appear at the PMC01 Pin12?
NO
Do the Drum PWM Pulses appear at the IC501 Pin107?
NO
Do the DFG Pulses appear at the PMC01 Pin11?
YES
NO
YES
Aren't the foil patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?
Replace the Cap M.
YES
Check the connector (PMC01) and the Drum Motor Ass'y.
Do the DFG Pulses appear at the IC501 Pin104?
NO
Aren't the foil patterns and the Components between IC501 Pin104 and PMC01 Pin11 short?
YES
Do the Drum PWM Pulses appear at the IC501 Pin107?
NO
Replace the IC501.
YES
Aren't the connecting patterns and the Components between IC501 Pin107 and PMC01 Pin12 short?

(3) When the Capstan Motor doesn't run,

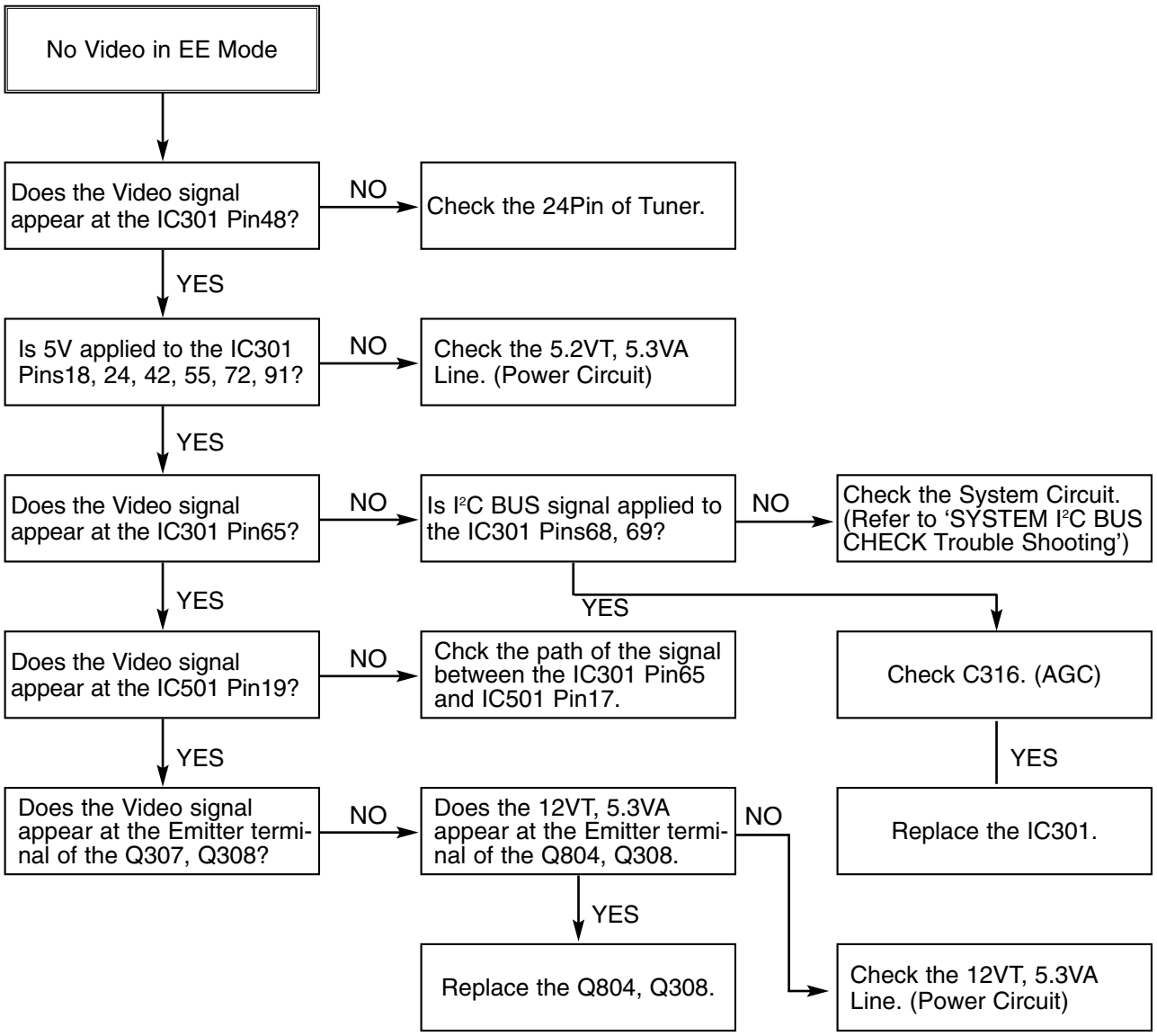

When the Capstan Motor doesn't run,
Does 12VA appear at the PMC01?
NO
Refer to "SMPS(CAPSTAN/12Volt) Trouble Shooting".
YES
Does 2.8V appear at the PMC01?
NO
YES
Check the PMC01 and the Capstan Motor Ass'y.
Does the PWM signal appear at the IC501 Pin108?
YES
NO
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Does the CFG signal appear at the PMC01 Pin1?
YES
NO
Does the CFG signal come into the IC501 Pin9?
Check the Capstan Motor Ass'y.
NO
YES
Does the Capstan PWM signal appear at the IC501 Pin108?
Aren't the foil patterns and component between IC501 Pin9 and PMC01 Pin1 short?
NO
YES
Aren't the foil patterns and Components between IC501 Pin108 and PMC01 Pin9 short?
Replace the IC501.

(4) KEY doesn't working

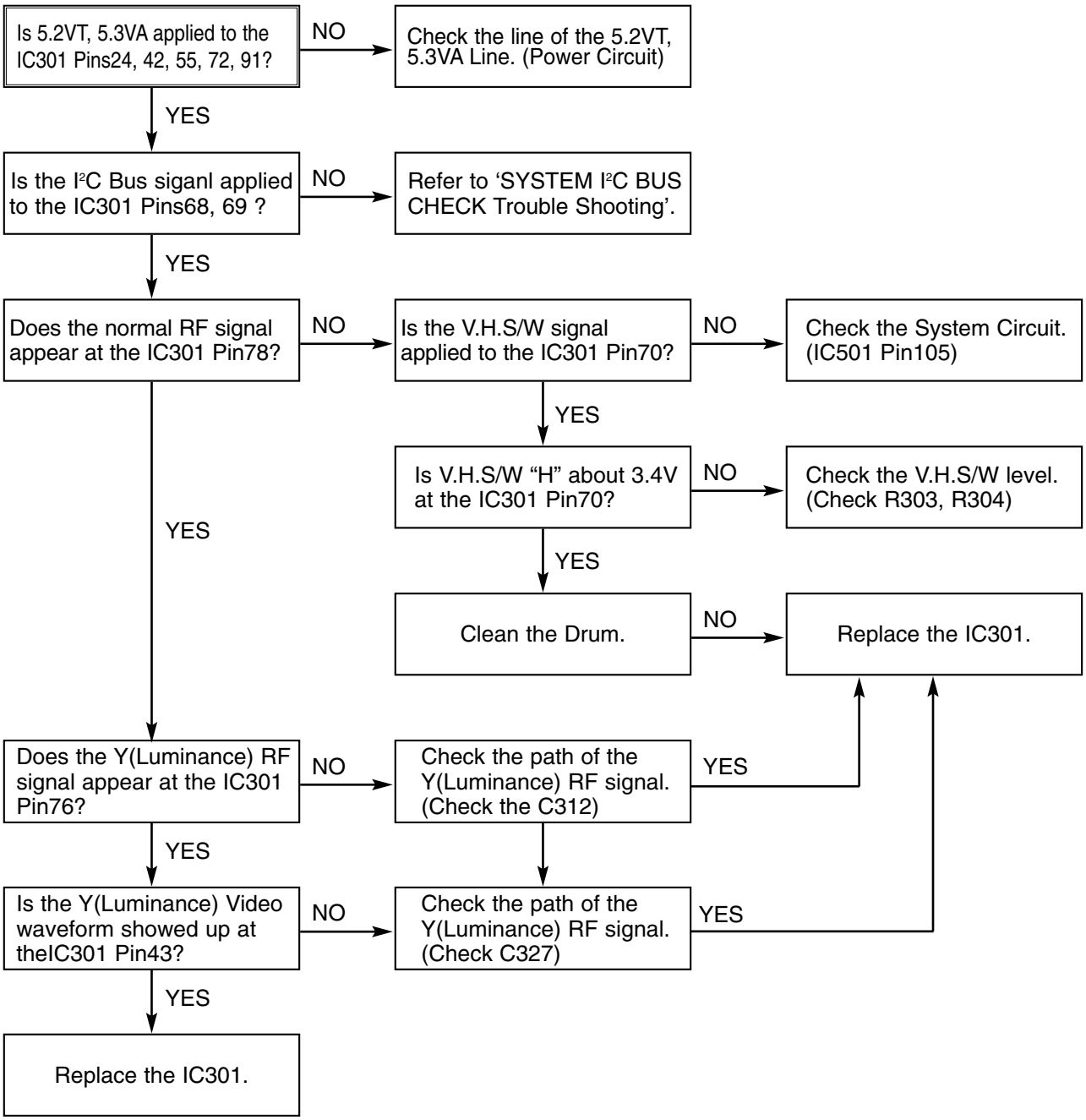

KEY doesn't working.
Is 5V applied to the IC501 Pin36?
NO
Refer to "SMPS 5.3VA Trouble Shooting".
YES
Does LED or FLD change when a function button is pressed?
NO
Replace the defective switches.

4. Y/C CIRCUIT

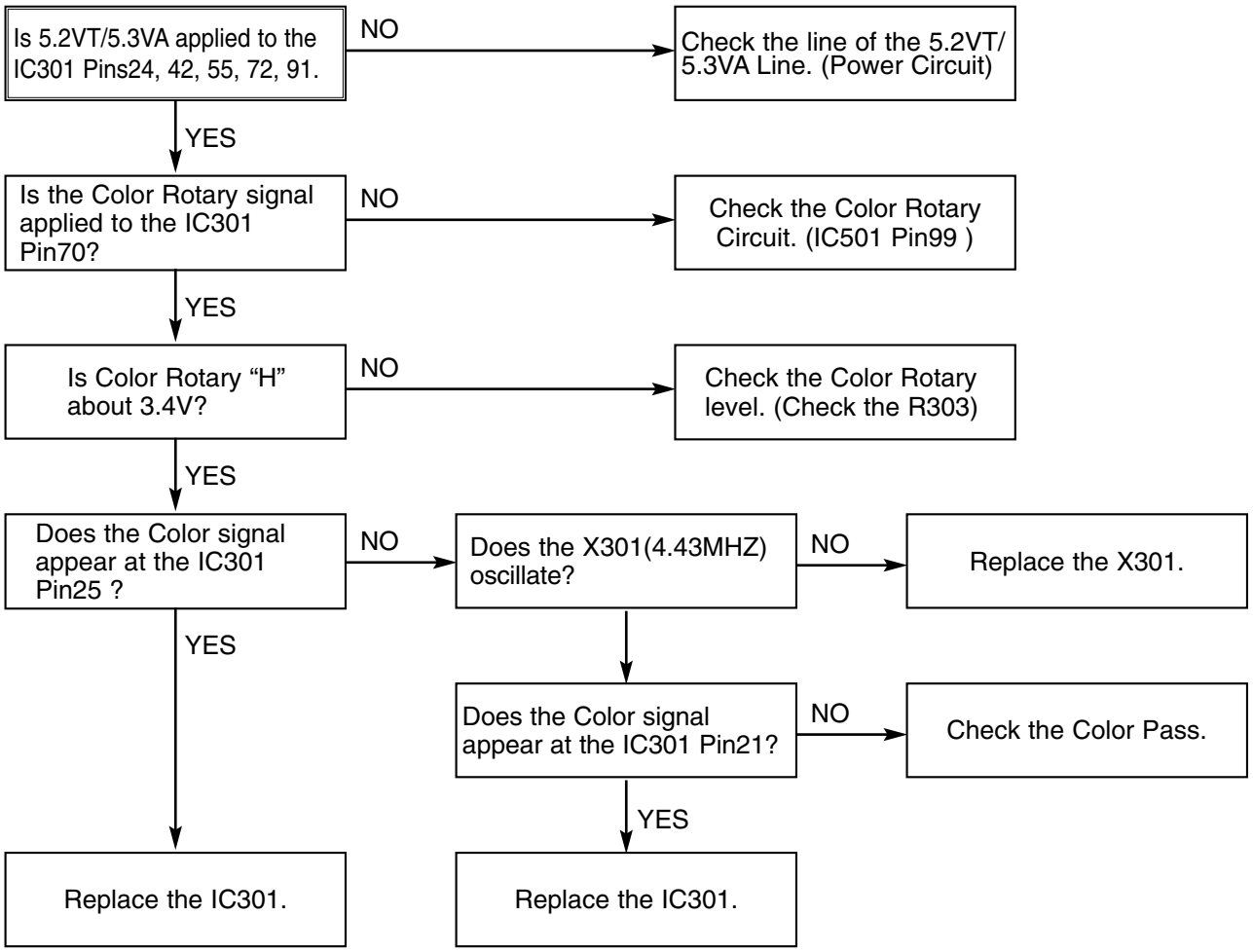
(1) No Video in EE Mode,


No Video in EE Mode
Does the Video signal appear at the IC301 Pin48?
NO
Check the 24Pin of Tuner.
YES
Is 5V applied to the IC301 Pins18, 24, 42, 55, 72, 91?
NO
Check the 5.2VT, 5.3VA Line. (Power Circuit)
YES
Does the Video signal appear at the IC301 Pin65?
NO
Is I²C BUS signal applied to the IC301 Pins68, 69?
NO
Check the System Circuit. (Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting')
YES
YES
Does the Video signal appear at the IC501 Pin19?
NO
Chck the path of the signal between the IC301 Pin65 and IC501 Pin17.
Check C316. (AGC)
YES
YES
Does the Video signal appear at the Emitter terminal of the Q307, Q308?
NO
Does the 12VT, 5.3VA appear at the Emitter terminal of the Q804, Q308.
NO
Replace the IC301.
YES
Replace the Q804, Q308.
Check the 12VT, 5.3VA Line. (Power Circuit)

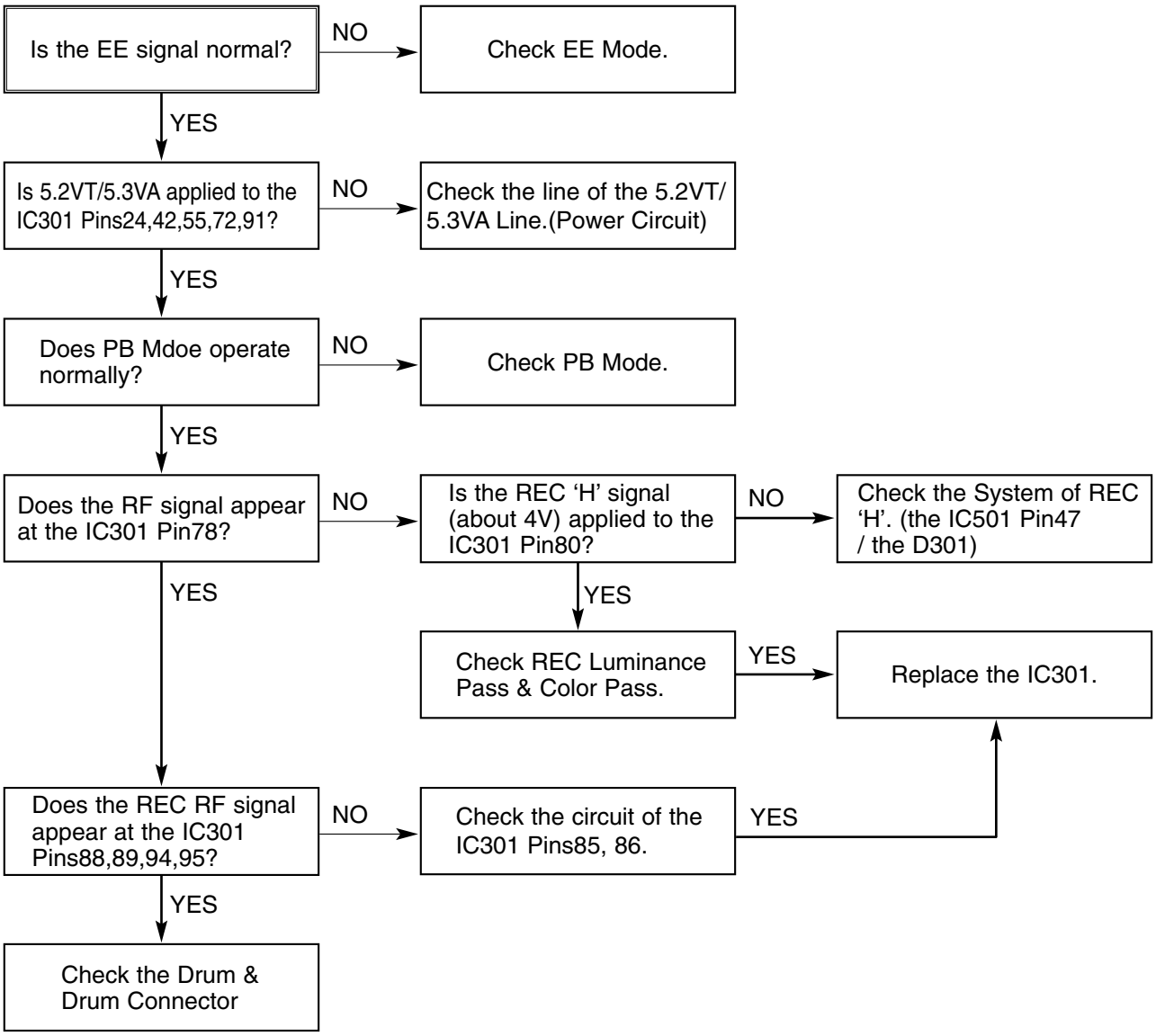
(2) When the Y(Luminance) signal doesn't appear on the screen in PB Mode,


Is 5.2VT, 5.3VA applied to the IC301 Pins24, 42, 55, 72, 91?
NO
Check the line of the 5.2VT, 5.3VA Line. (Power Circuit)
YES
Is the I²C Bus siganl applied to the IC301 Pins68, 69 ?
NO
Refer to 'SYSTEM I²C BUS CHECK Trouble Shooting'.
YES
Does the normal RF signal appear at the IC301 Pin78?
NO
Is the V.H.S/W signal applied to the IC301 Pin70?
NO
Check the System Circuit. (IC501 Pin105)
YES
Is V.H.S/W "H" about 3.4V at the IC301 Pin70?
NO
Check the V.H.S/W level. (Check R303, R304)
YES
Clean the Drum.
NO
Replace the IC301.
YES
Does the Y(Luminance) RF signal appear at the IC301 Pin76?
NO
Check the path of the Y(Luminance) RF signal. (Check the C312)
YES
YES
Is the Y(Luminance) Video waveform showed up at theIC301 Pin43?
NO
Check the path of the Y(Luminance) RF signal. (Check C327)
YES
YES
Replace the IC301.

(3) When the C(Color) signal doesn't appear on the screen in PB Mode,

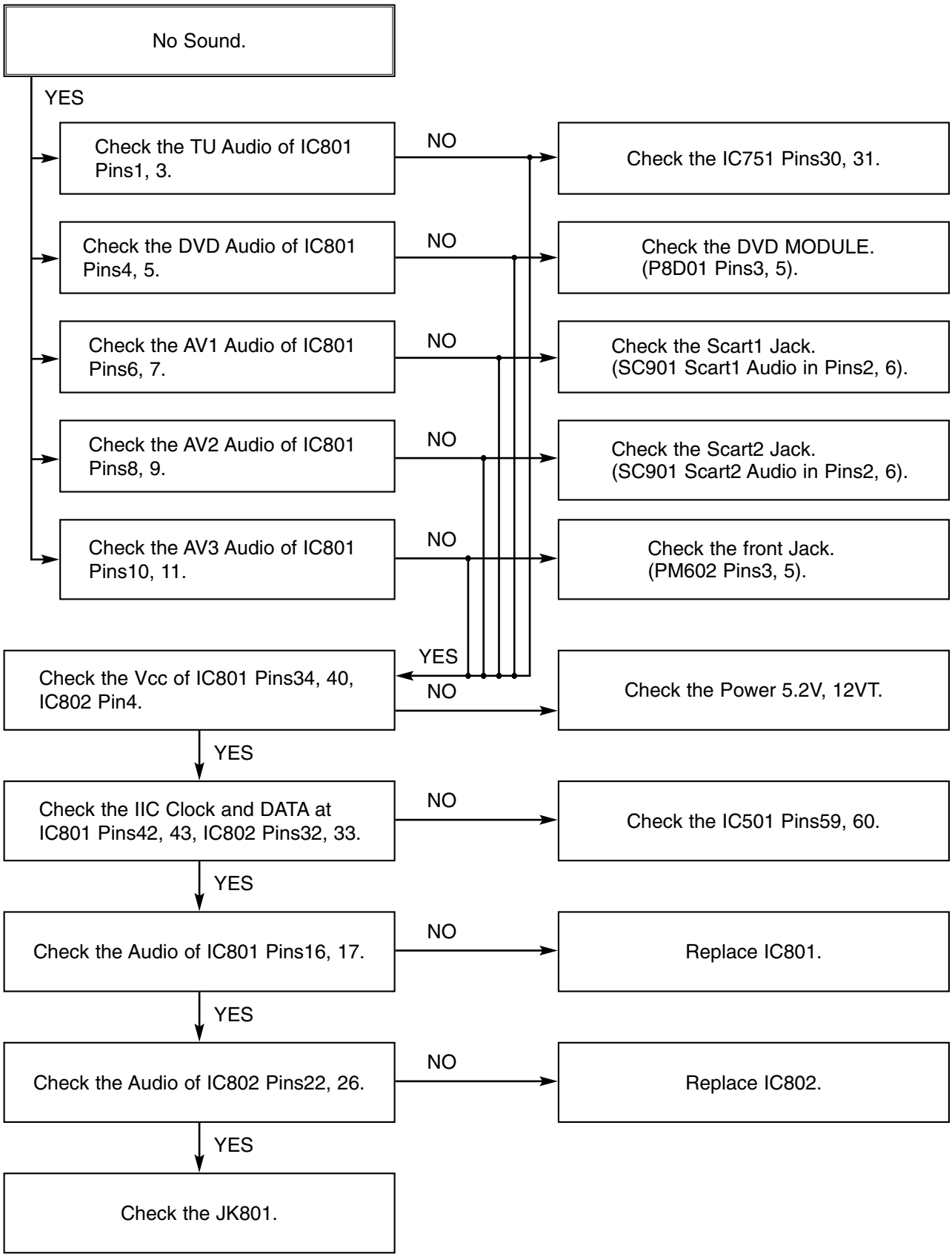

Is 5.2VT/5.3VA applied to the IC301 Pins24, 42, 55, 72, 91.
NO
Check the line of the 5.2VT/ 5.3VA Line. (Power Circuit)
YES
Is the Color Rotary signal applied to the IC301 Pin70?
NO
Check the Color Rotary Circuit. (IC501 Pin99)
YES
Is Color Rotary "H" about 3.4V?
NO
Check the Color Rotary level. (Check the R303)
YES
Does the Color signal appear at the IC301 Pin25 ?
NO
Does the X301(4.43MHZ) oscillate?
NO
Replace the X301.
YES
Does the Color signal appear at the IC301 Pin21?
NO
Check the Color Pass.
YES
Replace the IC301.
Replace the IC301.

(4) When the Video signal doesn't appear on the screen in REC Mode,

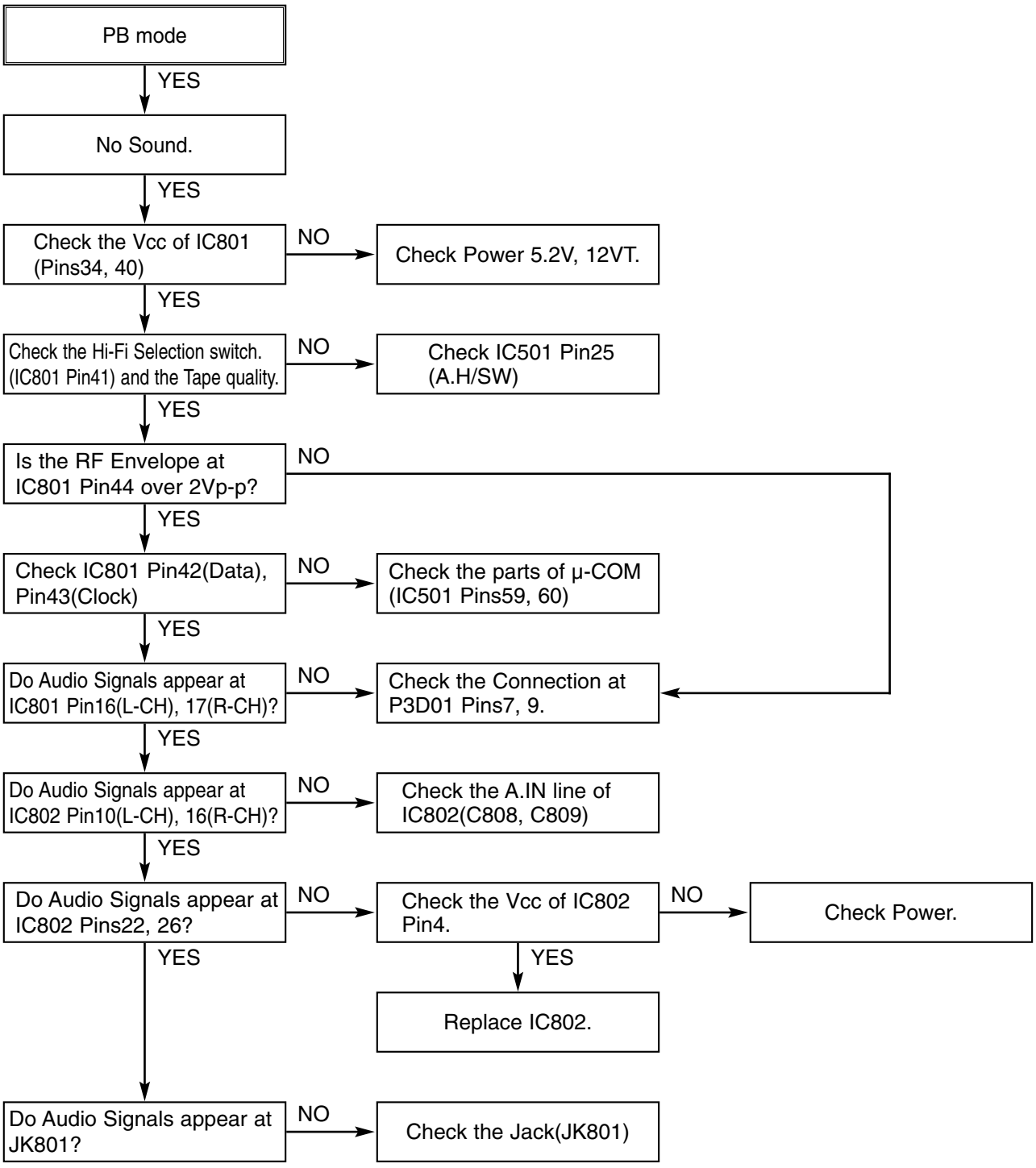

Is the EE signal normal?
NO
Check EE Mode.
YES
Is 5.2VT/5.3VA applied to the IC301 Pins24,42,55,72,91?
NO
Check the line of the 5.2VT/ 5.3VA Line.(Power Circuit)
YES
Does PB Mdoe operate normally?
NO
Check PB Mode.
YES
Does the RF signal appear at the IC301 Pin78?
NO
Is the REC 'H' signal (about 4V) applied to the IC301 Pin80?
NO
Check the System of REC 'H'. (the IC501 Pin47 / the D301)
YES
YES
Check REC Luminance Pass & Color Pass.
YES
Replace the IC301.
Does the REC RF signal appear at the IC301 Pins88,89,94,95?
NO
Check the circuit of the IC301 Pins85, 86.
YES
YES
Check the Drum & Drum Connector

5. Hi-Fi CIRCUIT

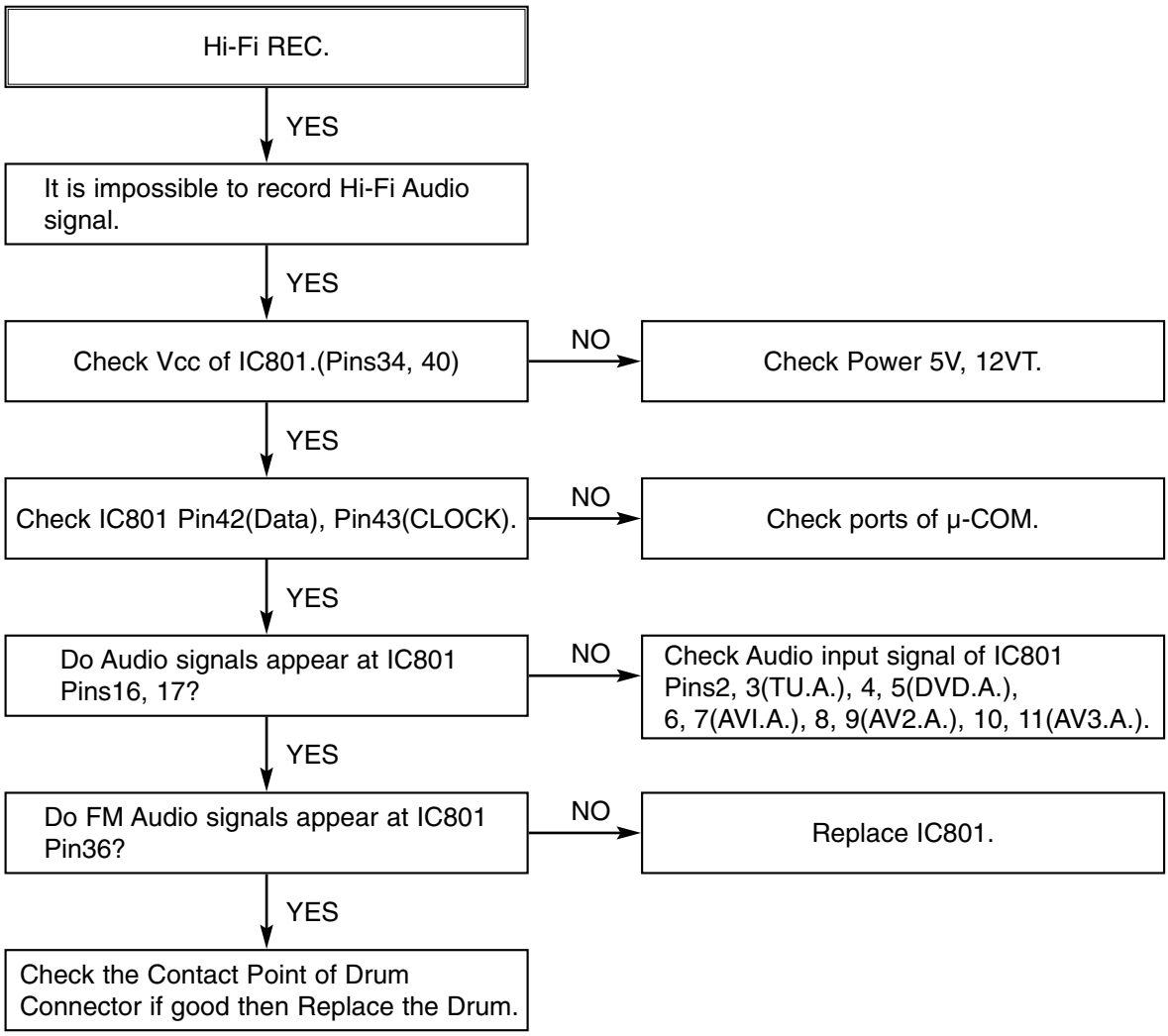
(A) No Sound(EE Mode)


No Sound.
YES
Check the TU Audio of IC801 Pins1, 3.
NO
Check the IC751 Pins30, 31.
Check the DVD Audio of IC801 Pins4, 5.
NO
Check the DVD MODULE. (P8D01 Pins3, 5).
Check the AV1 Audio of IC801 Pins6, 7.
NO
Check the Scart1 Jack. (SC901 Scart1 Audio in Pins2, 6).
Check the AV2 Audio of IC801 Pins8, 9.
NO
Check the Scart2 Jack. (SC901 Scart2 Audio in Pins2, 6).
Check the AV3 Audio of IC801 Pins10, 11.
NO
Check the front Jack. (PM602 Pins3, 5).
YES
Check the Vcc of IC801 Pins34, 40, IC802 Pin4.
NO
Check the Power 5.2V, 12VT.
YES
Check the IIC Clock and DATA at IC801 Pins42, 43, IC802 Pins32, 33.
NO
Check the IC501 Pins59, 60.
YES
Check the Audio of IC801 Pins16, 17.
NO
Replace IC801.
YES
Check the Audio of IC802 Pins22, 26.
NO
Replace IC802.
YES
Check the JK801.

(B) Hi-Fi Playback

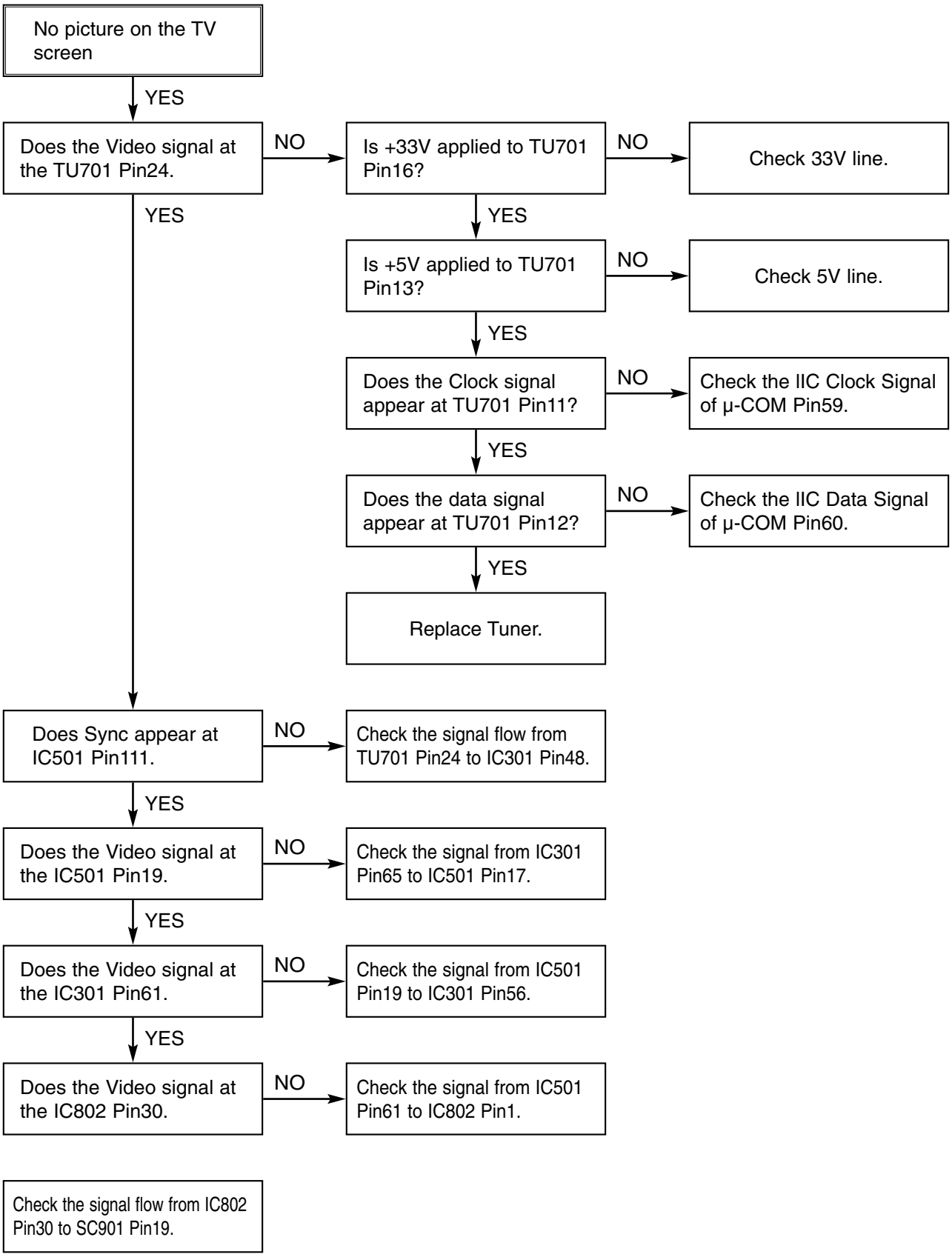


(C)

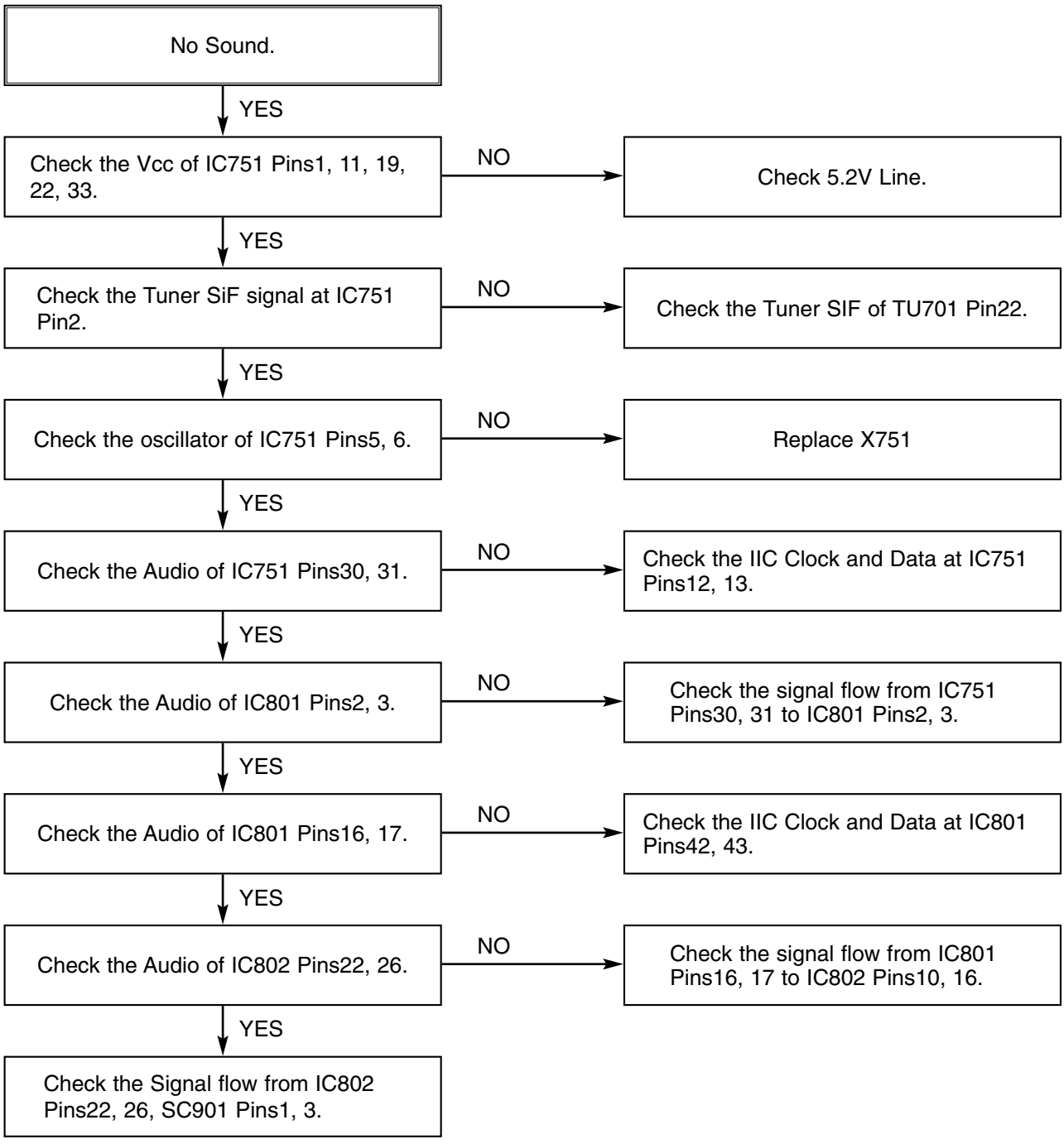

Hi-Fi REC.
YES
It is impossible to record Hi-Fi Audio signal.
YES
Check Vcc of IC801.(Pins34, 40)
NO
Check Power 5V, 12VT.
YES
Check IC801 Pin42(Data), Pin43(CLOCK).
NO
Check ports of µ-COM.
YES
Do Audio signals appear at IC801 Pins16, 17?
NO
Check Audio input signal of IC801 Pins2, 3(TU.A.), 4, 5(DVD.A.), 6, 7(AVI.A.), 8, 9(AV2.A.), 10, 11(AV3.A.).
YES
Do FM Audio signals appear at IC801 Pin36?
NO
Replace IC801.
YES
Check the Contact Point of Drum Connector if good then Replace the Drum.

6. Tuner/IF CIRCUIT

(A) No Picture on the TV screen


No picture on the TV screen
YES
Does the Video signal at the TU701 Pin24.
NO
Is +33V applied to TU701 Pin16?
NO
Check 33V line.
YES
YES
Is +5V applied to TU701 Pin13?
NO
Check 5V line.
YES
Does the Clock signal appear at TU701 Pin11?
NO
Check the IIC Clock Signal of µ-COM Pin59.
YES
Does the data signal appear at TU701 Pin12?
NO
Check the IIC Data Signal of µ-COM Pin60.
YES
Replace Tuner.
Does Sync appear at IC501 Pin111.
NO
Check the signal flow from TU701 Pin24 to IC301 Pin48.
YES
Does the Video signal at the IC501 Pin19.
NO
Check the signal from IC301 Pin65 to IC501 Pin17.
YES
Does the Video signal at the IC301 Pin61.
NO
Check the signal from IC501 Pin19 to IC301 Pin56.
YES
Does the Video signal at the IC802 Pin30.
NO
Check the signal from IC501 Pin61 to IC802 Pin1.
Check the signal flow from IC802 Pin30 to SC901 Pin19.

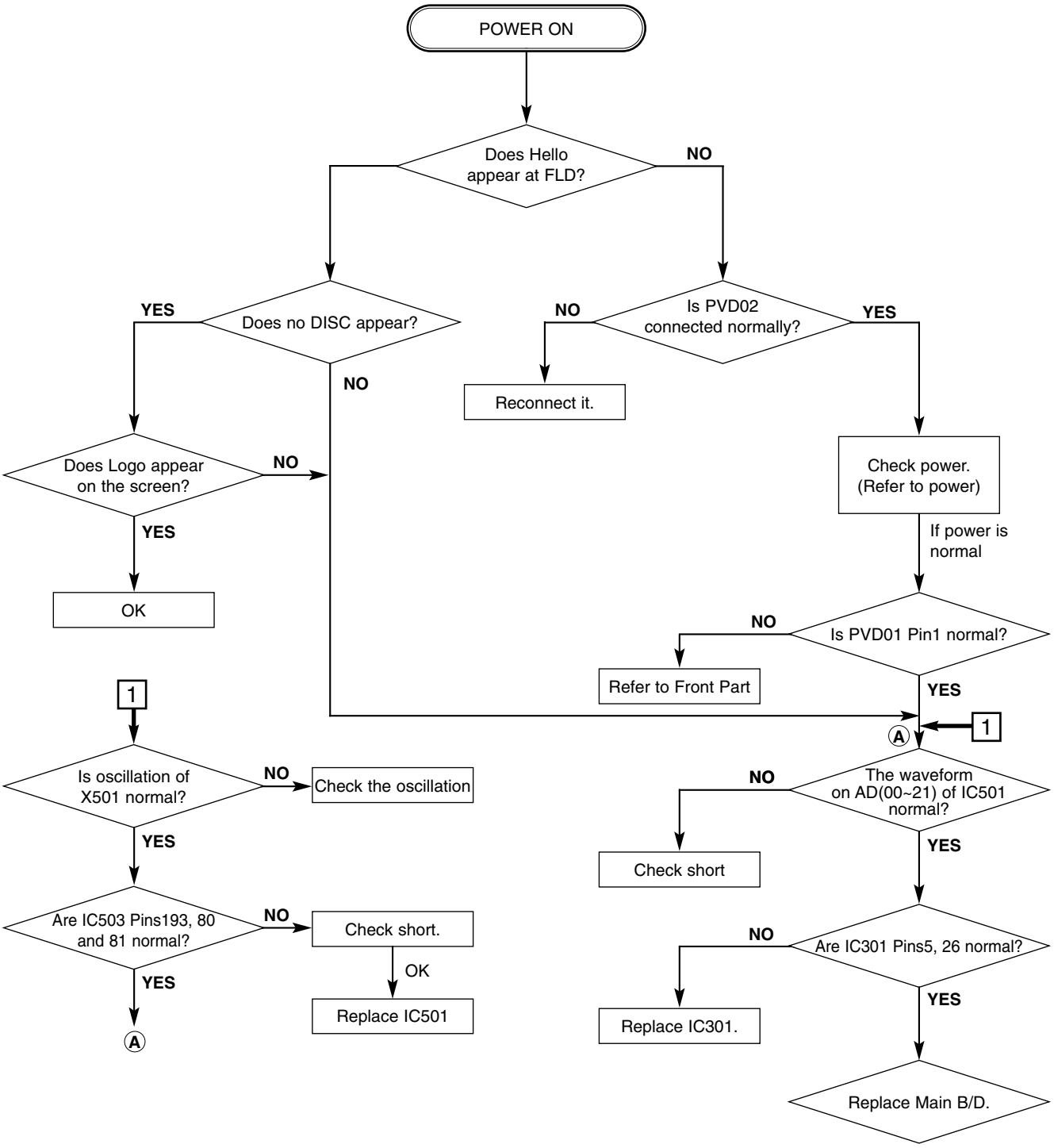
(B) No Sound


No Sound.
YES
Check the Vcc of IC751 Pins1, 11, 19, 22, 33.
NO
Check 5.2V Line.
YES
Check the Tuner SiF signal at IC751 Pin2.
NO
Check the Tuner SIF of TU701 Pin22.
YES
Check the oscillator of IC751 Pins5, 6.
NO
Replace X751
YES
Check the Audio of IC751 Pins30, 31.
NO
Check the IIC Clock and Data at IC751 Pins12, 13.
YES
Check the Audio of IC801 Pins2, 3.
NO
Check the signal flow from IC751 Pins30, 31 to IC801 Pins2, 3.
YES
Check the Audio of IC801 Pins16, 17.
NO
Check the IIC Clock and Data at IC801 Pins42, 43.
YES
Check the Audio of IC802 Pins22, 26.
NO
Check the signal flow from IC801 Pins16, 17 to IC802 Pins10, 16.
YES
Check the Signal flow from IC802 Pins22, 26, SC901 Pins1, 3.

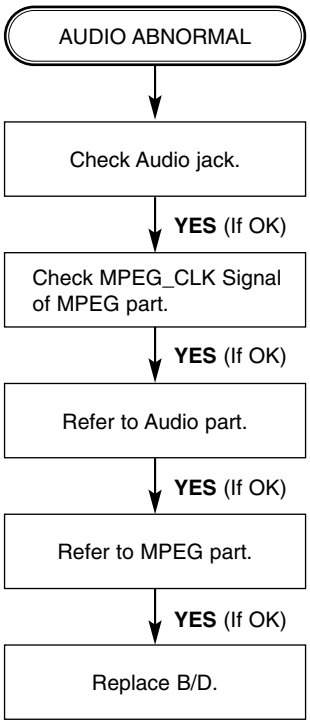
DVD PART
ELECTRICAL TROUBLESHOOTING GUIDE

1. µ-COM Circuit

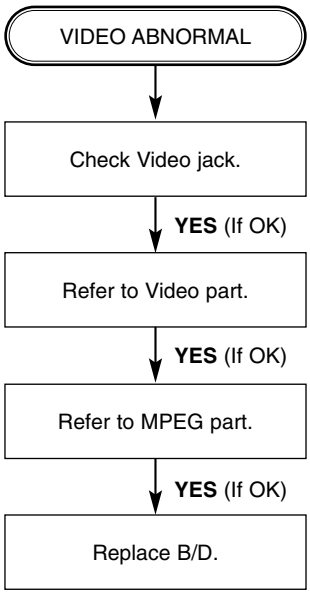
A. No Power



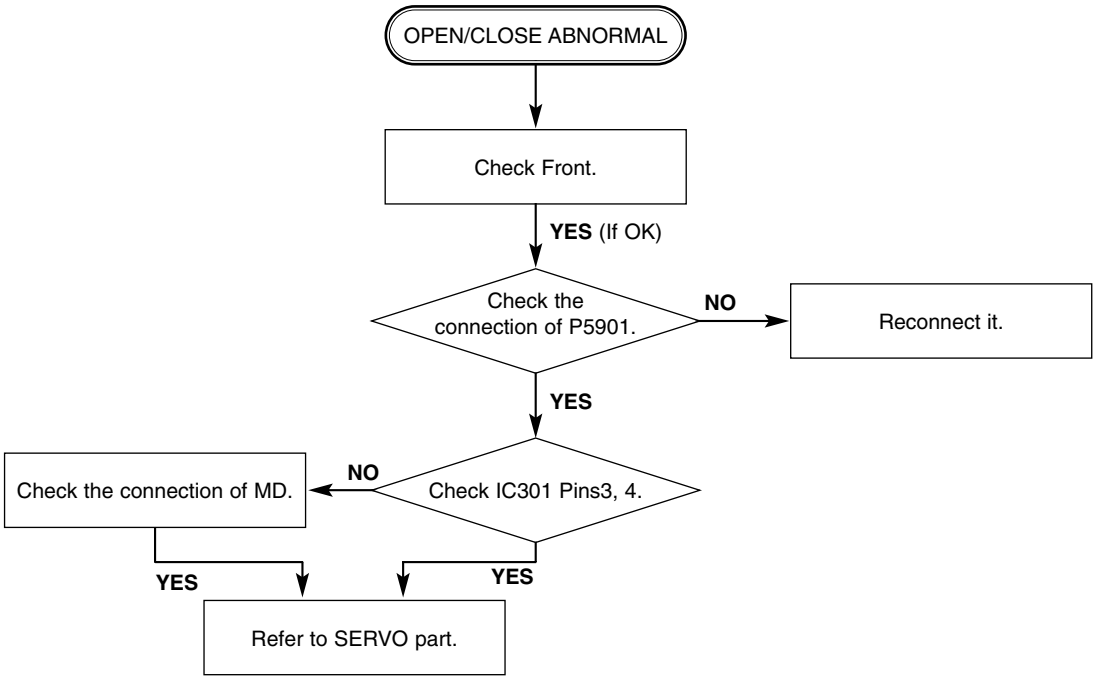
B. Audio abnormal



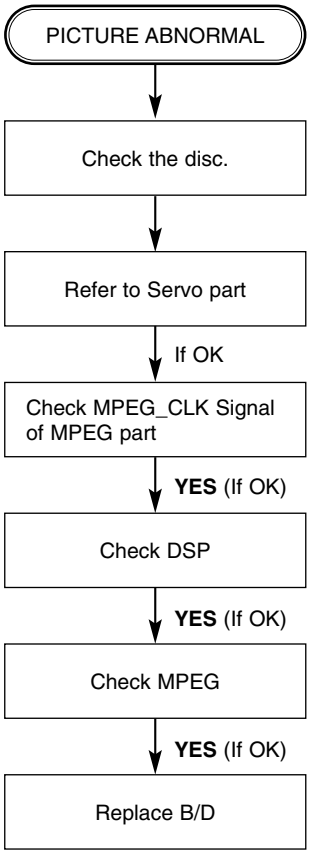
C. Video abnormal



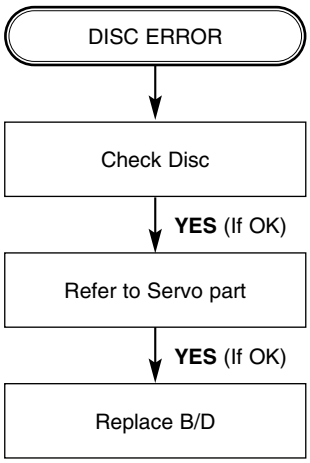
D. Open/Close abnormal



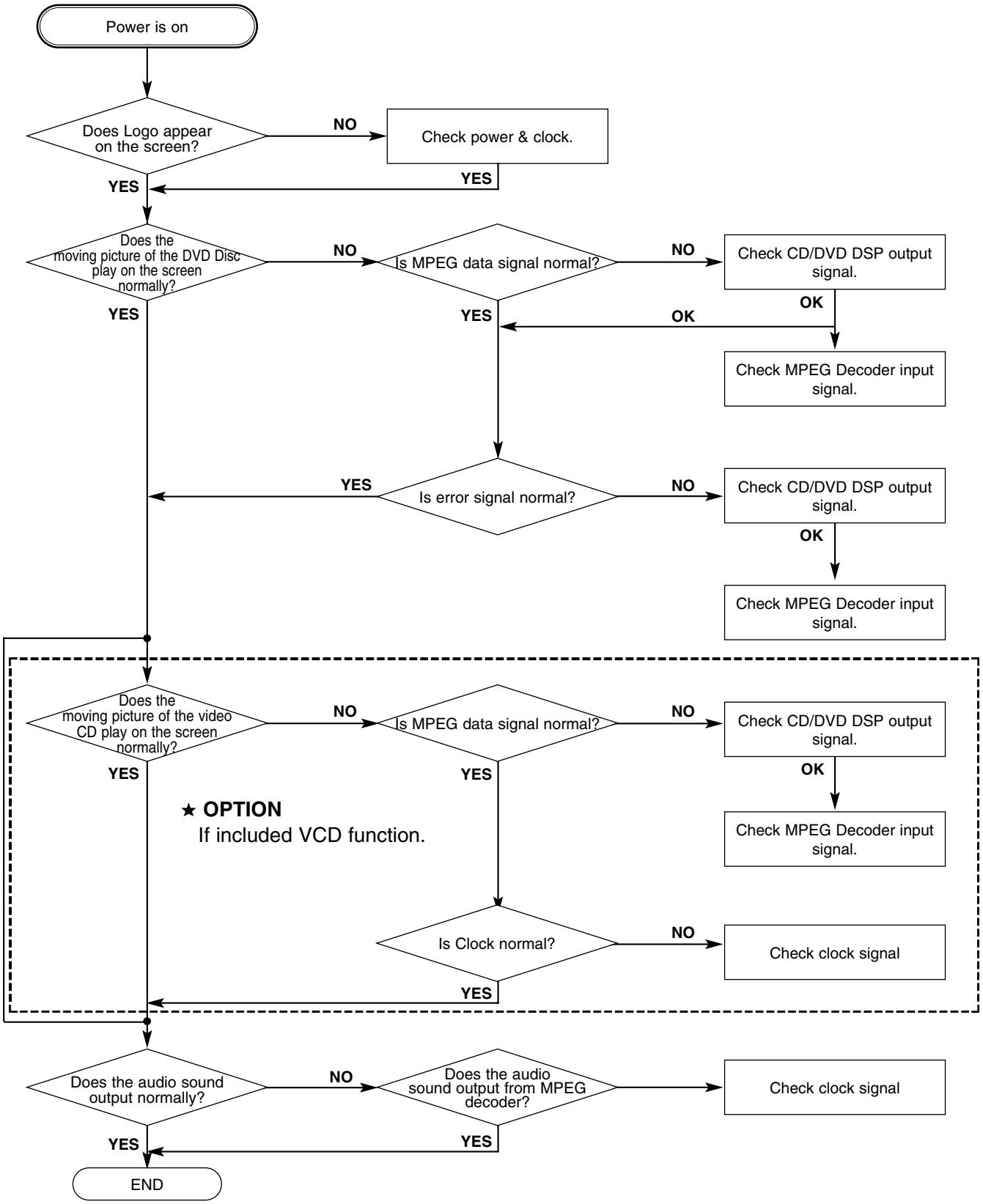
E. Picture abnormal



F. Disc Error

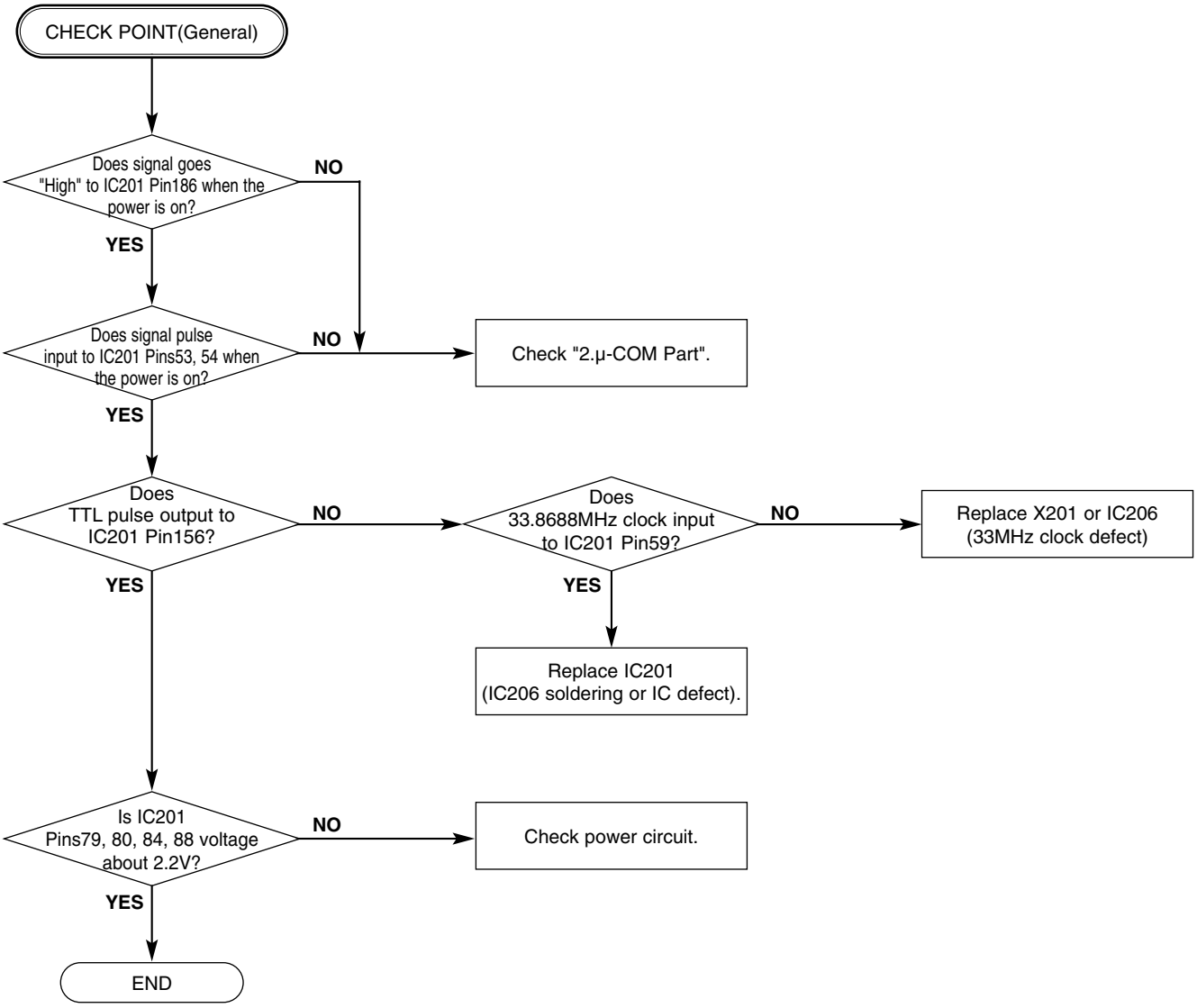


2. MPEG Circuit



3. RF/Servo Circuit

A.



B.

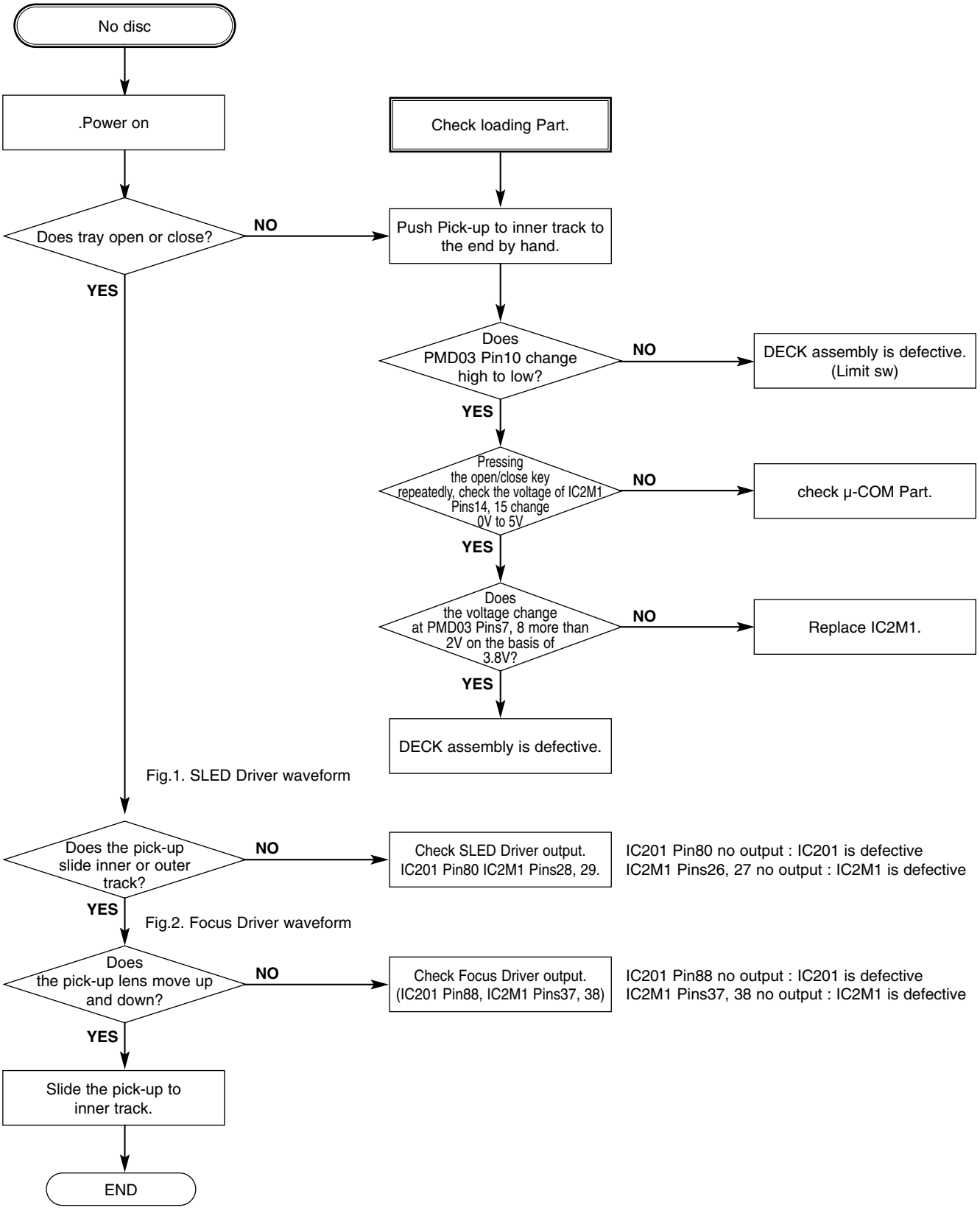

No disc
.Power on
Does tray open or close?
NO
YES
Check loading Part.
Push Pick-up to inner track to the end by hand.
Does PMD03 Pin10 change high to low?
NO
DECK assembly is defective. (Limit sw)
YES
Pressing the open/close key repeatedly, check the voltage of IC2M1 Pins14, 15 change 0V to 5V
NO
check µ-COM Part.
YES
Does the voltage change at PMD03 Pins7, 8 more than 2V on the basis of 3.8V?
NO
Replace IC2M1.
YES
DECK assembly is defective.
Does the pick-up slide inner or outer track?
NO
Check SLED Driver output. IC201 Pin80 IC2M1 Pins28, 29.
IC201 Pin80 no output : IC201 is defective
IC2M1 Pins26, 27 no output : IC2M1 is defective
YES
Does the pick-up lens move up and down?
NO
Check Focus Driver output. (IC201 Pin88, IC2M1 Pins37, 38)
IC201 Pin88 no output : IC201 is defective
IC2M1 Pins37, 38 no output : IC2M1 is defective
YES
Slide the pick-up to inner track.
END

Fig.1. SLED Driver waveform

Fig.2. Focus Driver waveform

C.

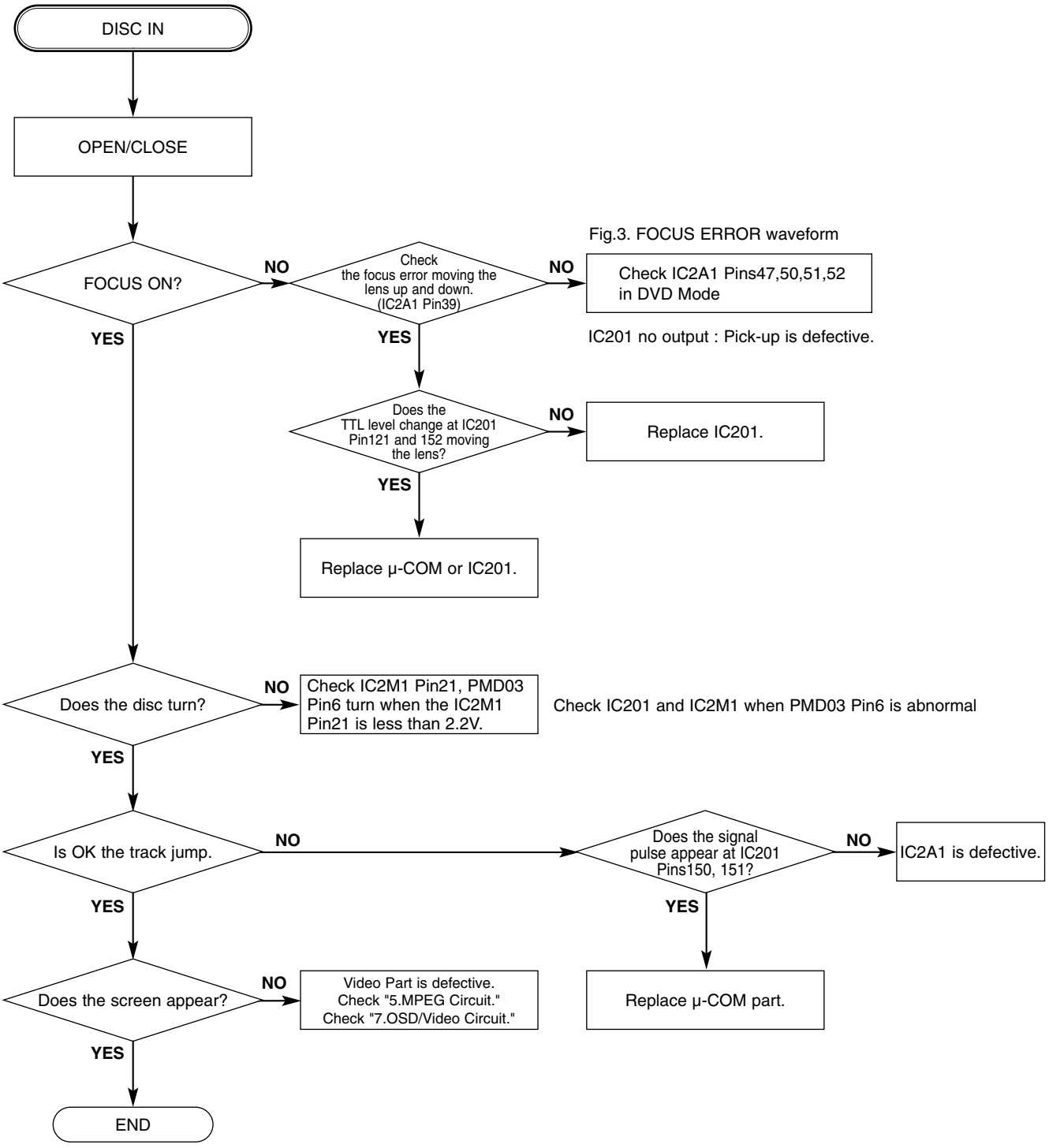
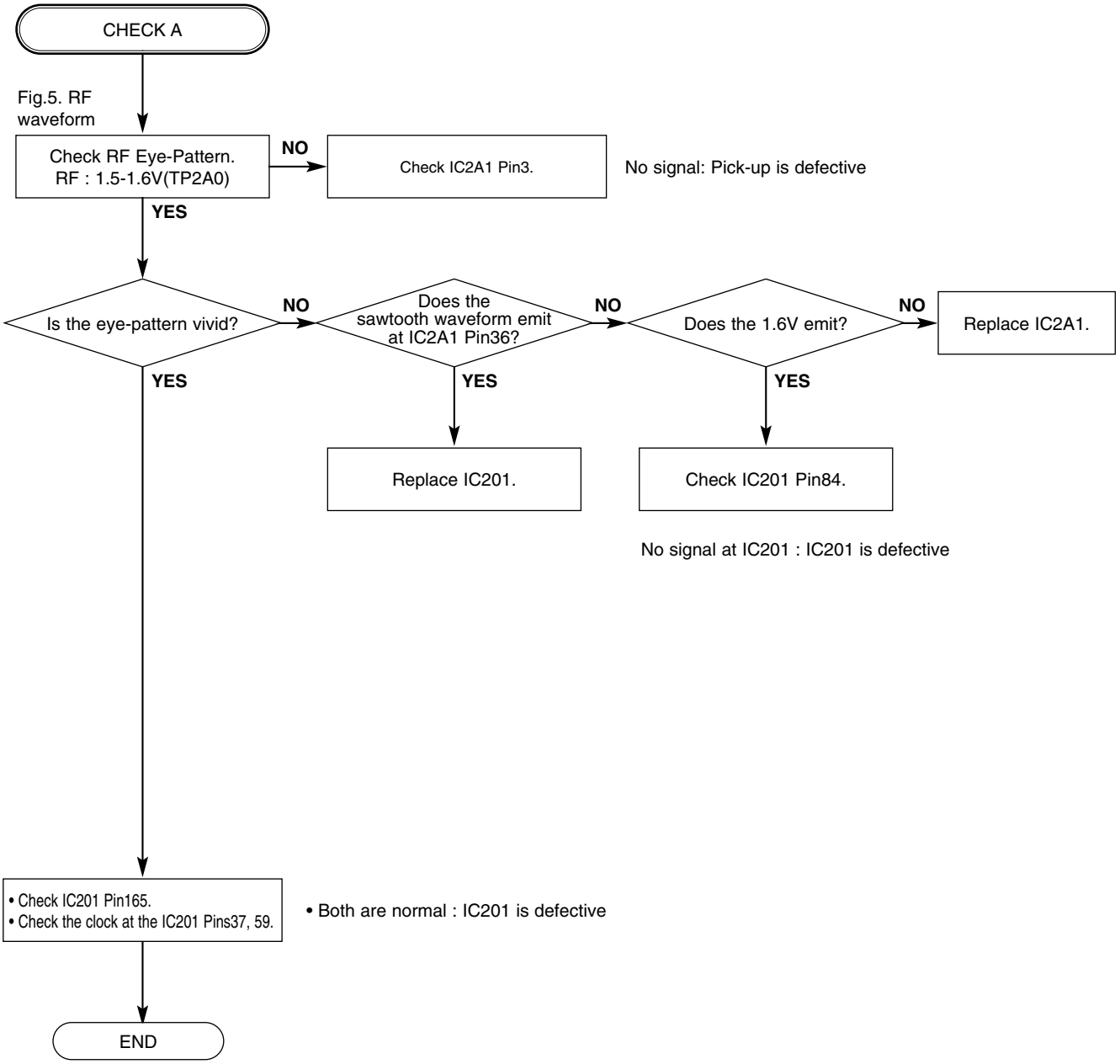


Fig.3. FOCUS ERROR waveform

IC201 no output : Pick-up is defective.

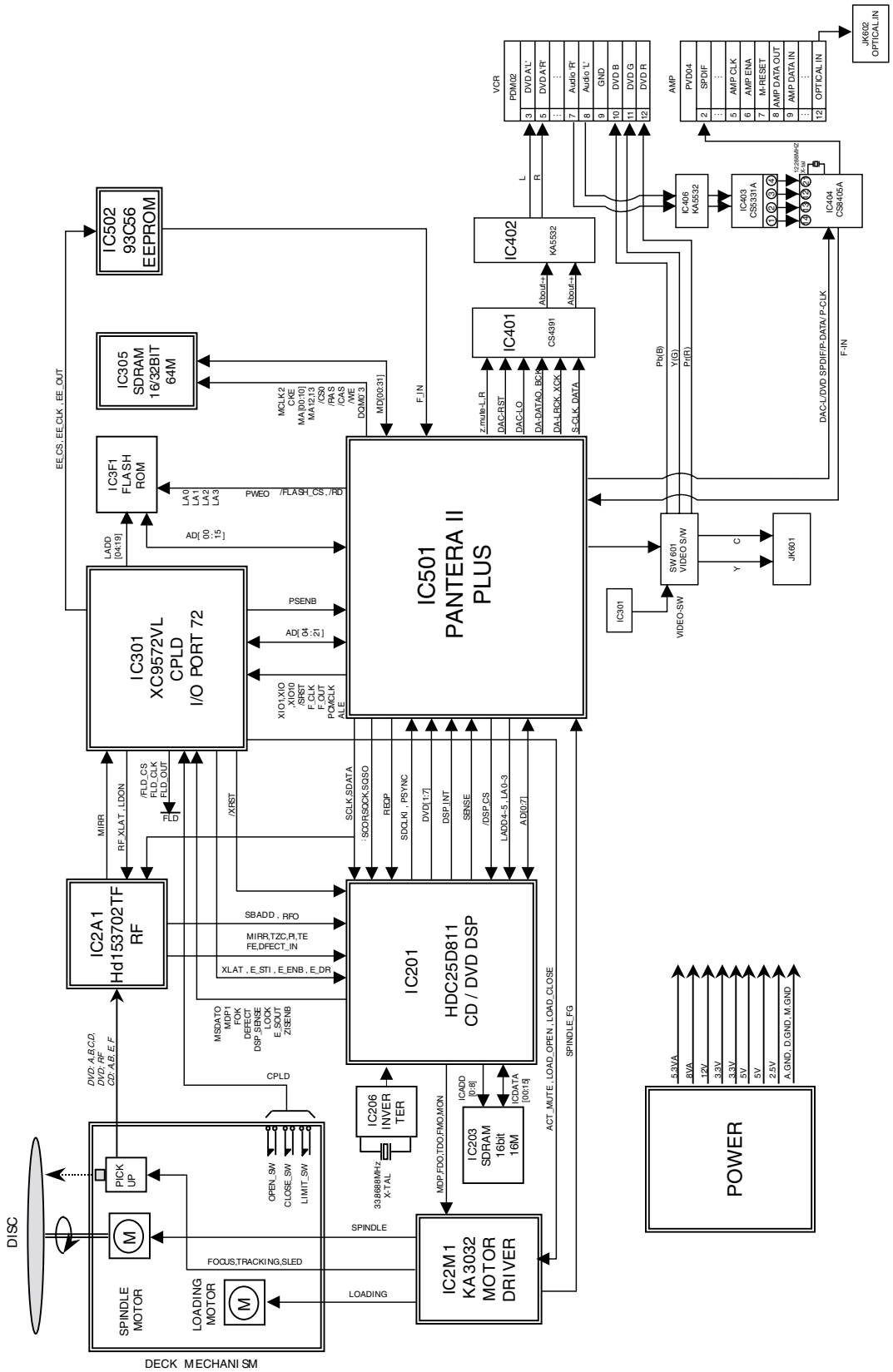
Check IC201 and IC2M1 when PMD03 Pin6 is abnormal

D.

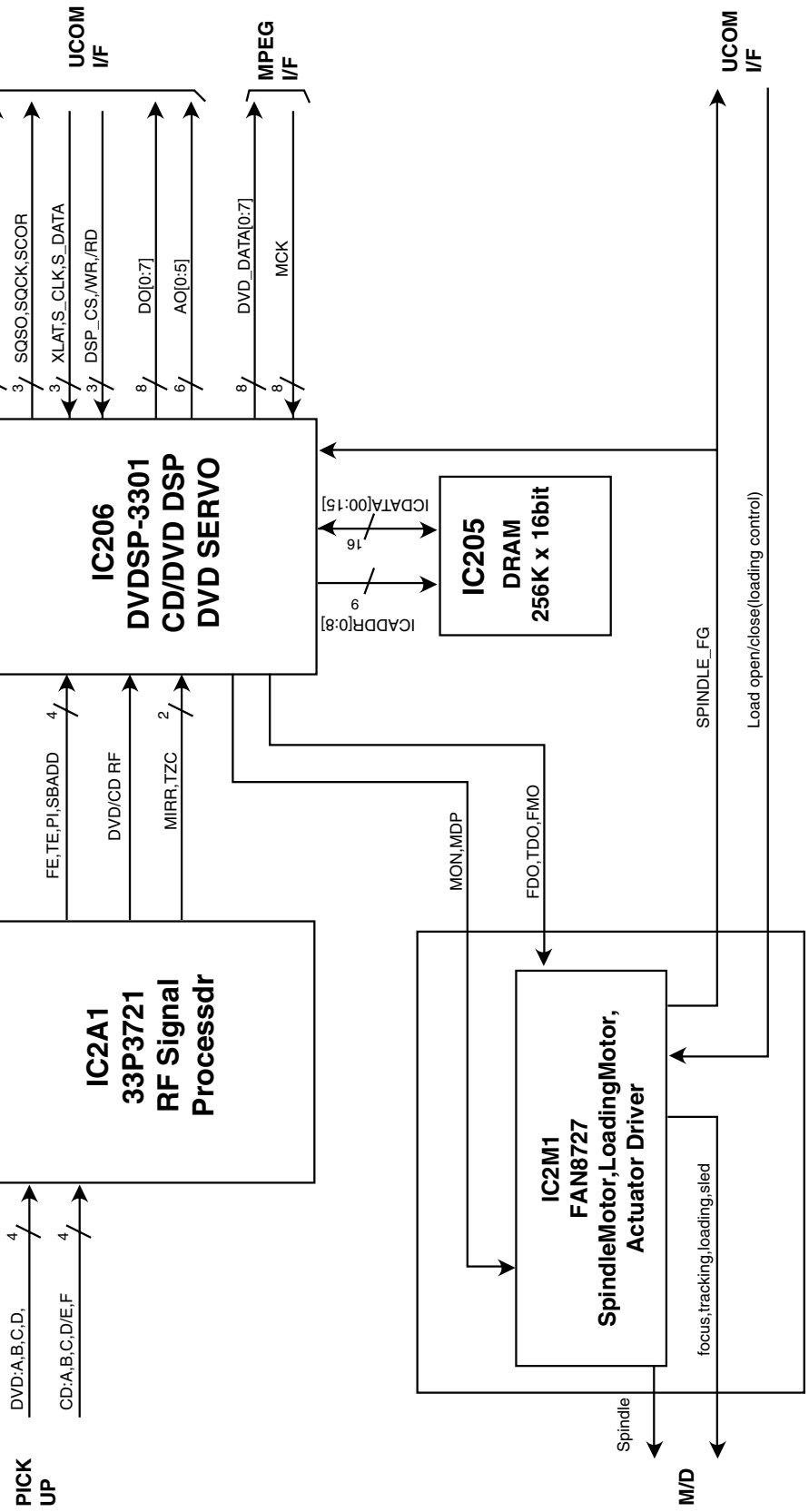

CHECK A
Fig.5. RF waveform
Check RF Eye-Pattern.
RF : 1.5-1.6V(TP2A0)
NO
Check IC2A1 Pin3.
No signal: Pick-up is defective
YES
Is the eye-pattern vivid?
NO
Does the sawtooth waveform emit at IC2A1 Pin36?
NO
Does the 1.6V emit?
NO
Replace IC2A1.
YES
YES
YES
Replace IC201.
Check IC201 Pin84.
No signal at IC201 : IC201 is defective
• Check IC201 Pin165.
• Check the clock at the IC201 Pins37, 59.
• Both are normal : IC201 is defective
END

BLOCK DIAGRAMS

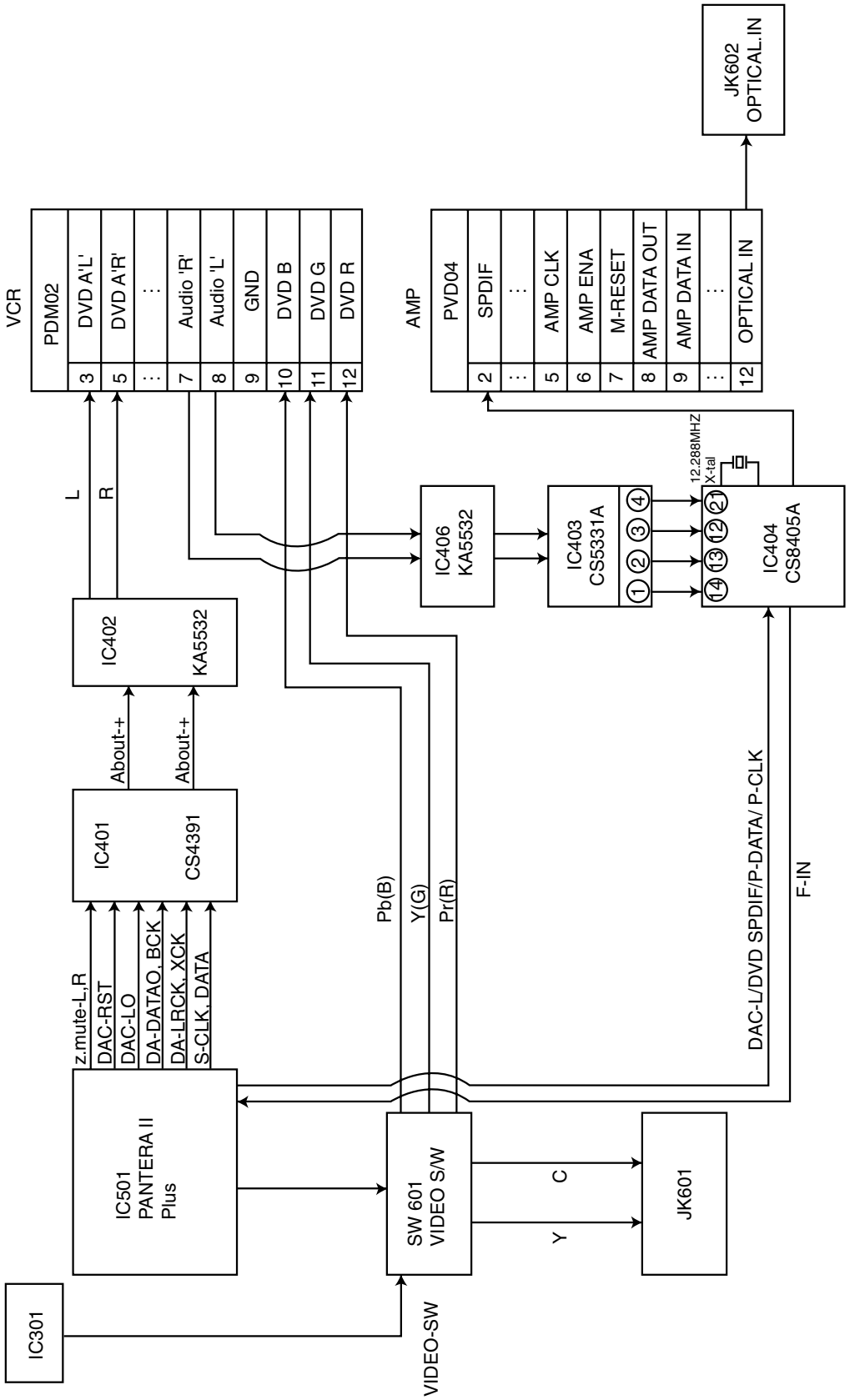
1. DVD OVERALL BLOCK DIAGRAM



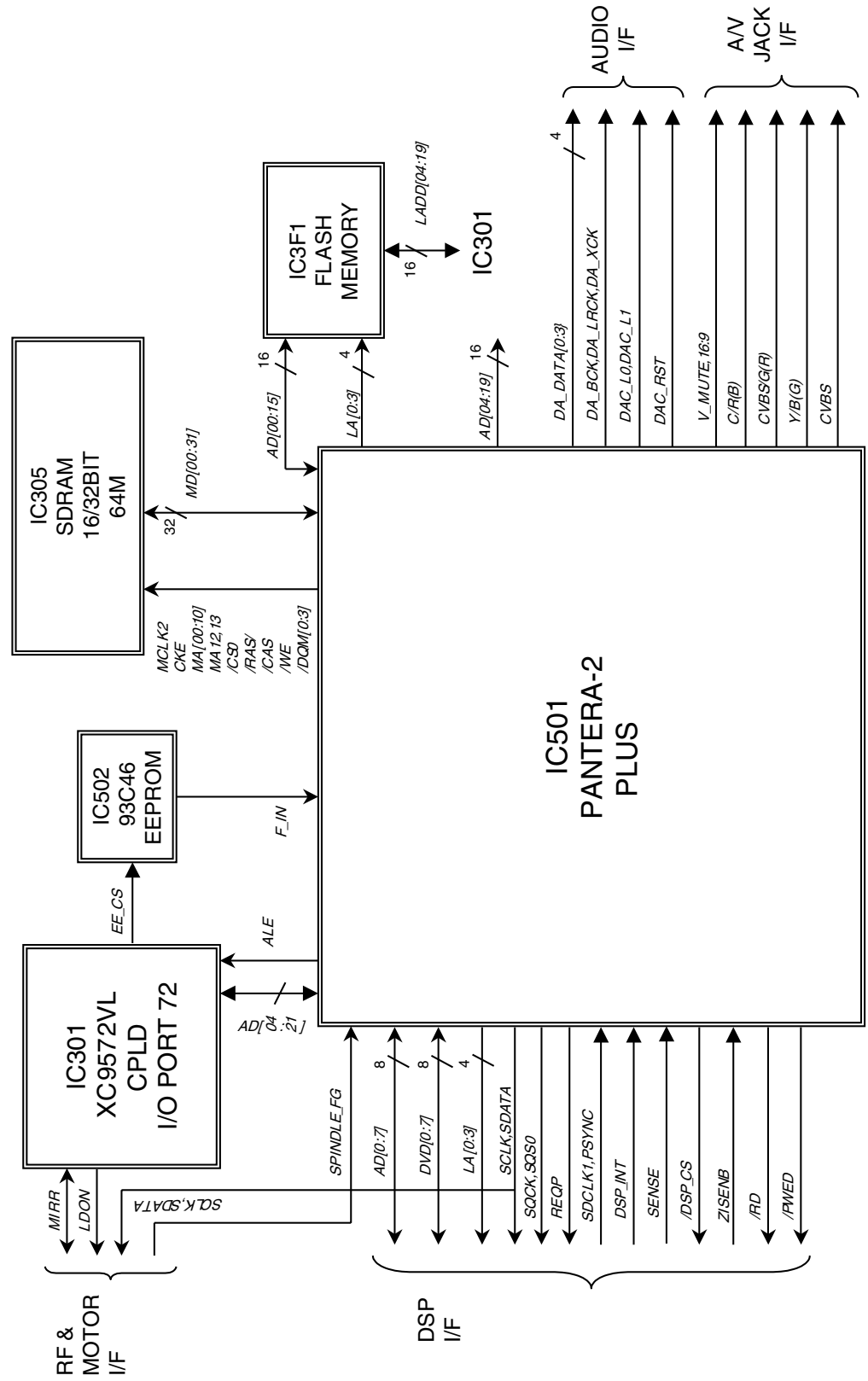
2. RF/CD DSP/DVD DSP/DVD SERVO BLOCK DIAGRAM



3. AUDIO BLOCK DIAGRAM

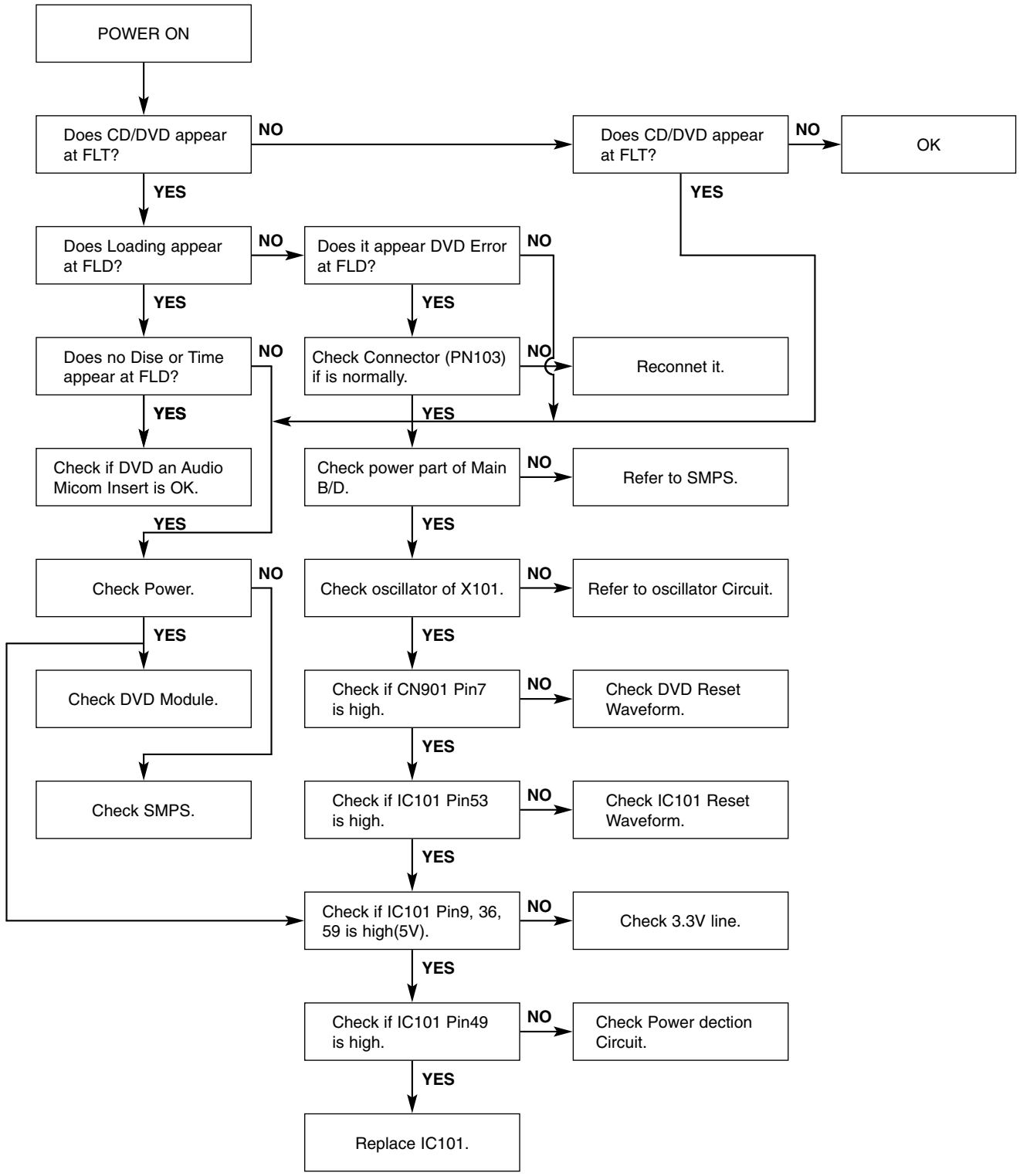


4. MPEG Block Diagram



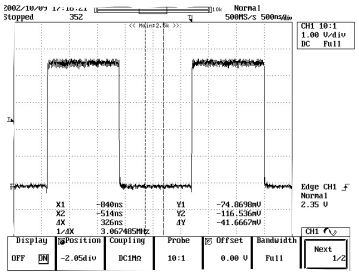
AMP PART
ELECTRICAL TROUBLESHOOTING GUIDE

AUDIO µ-COM Circuit



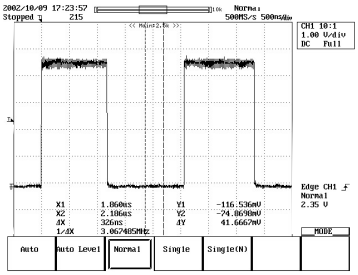
WAVEFORMS OF MAJOR CHECK POINT

1)



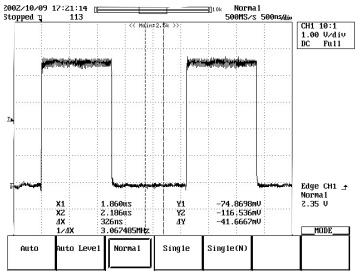
• R311 → FRONT L

2)



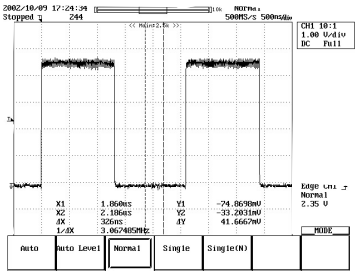
• R303 → FRONT R

3)



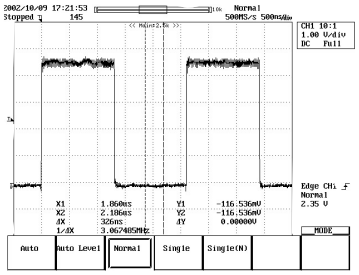
• R309 → SURROUND L

4)



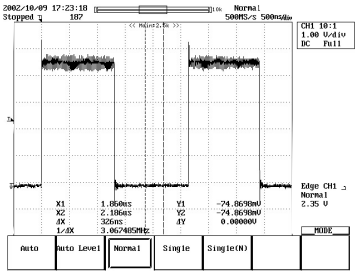
• R309 → SURROUND R

5)



• R307 → CENTER

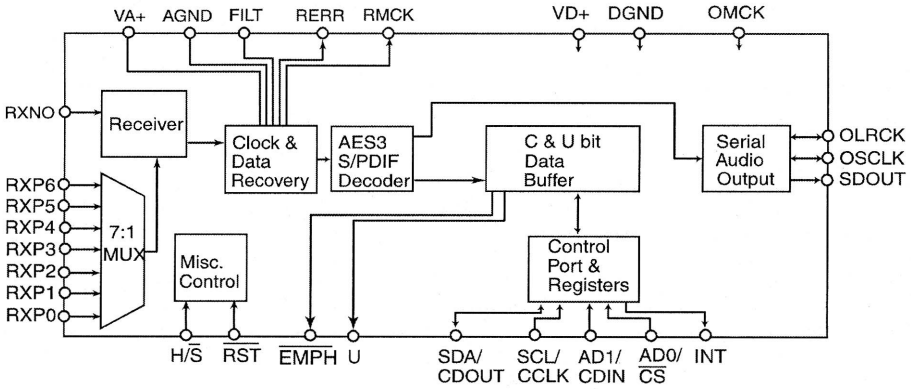
6)



• R305 → WOOFER

INTERNAL BLOCK DIAGRAM OF ICs

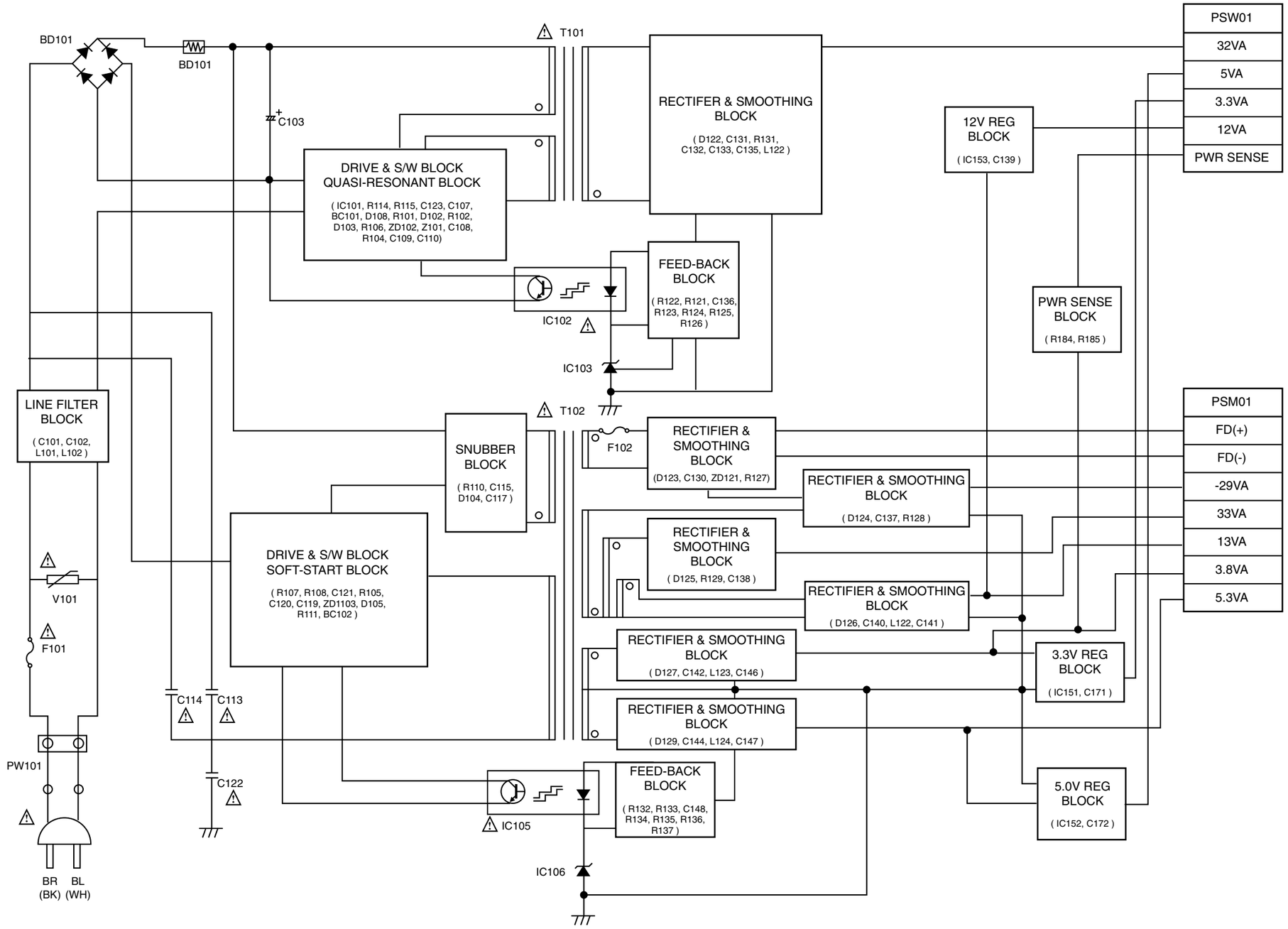
- **CS8415A**



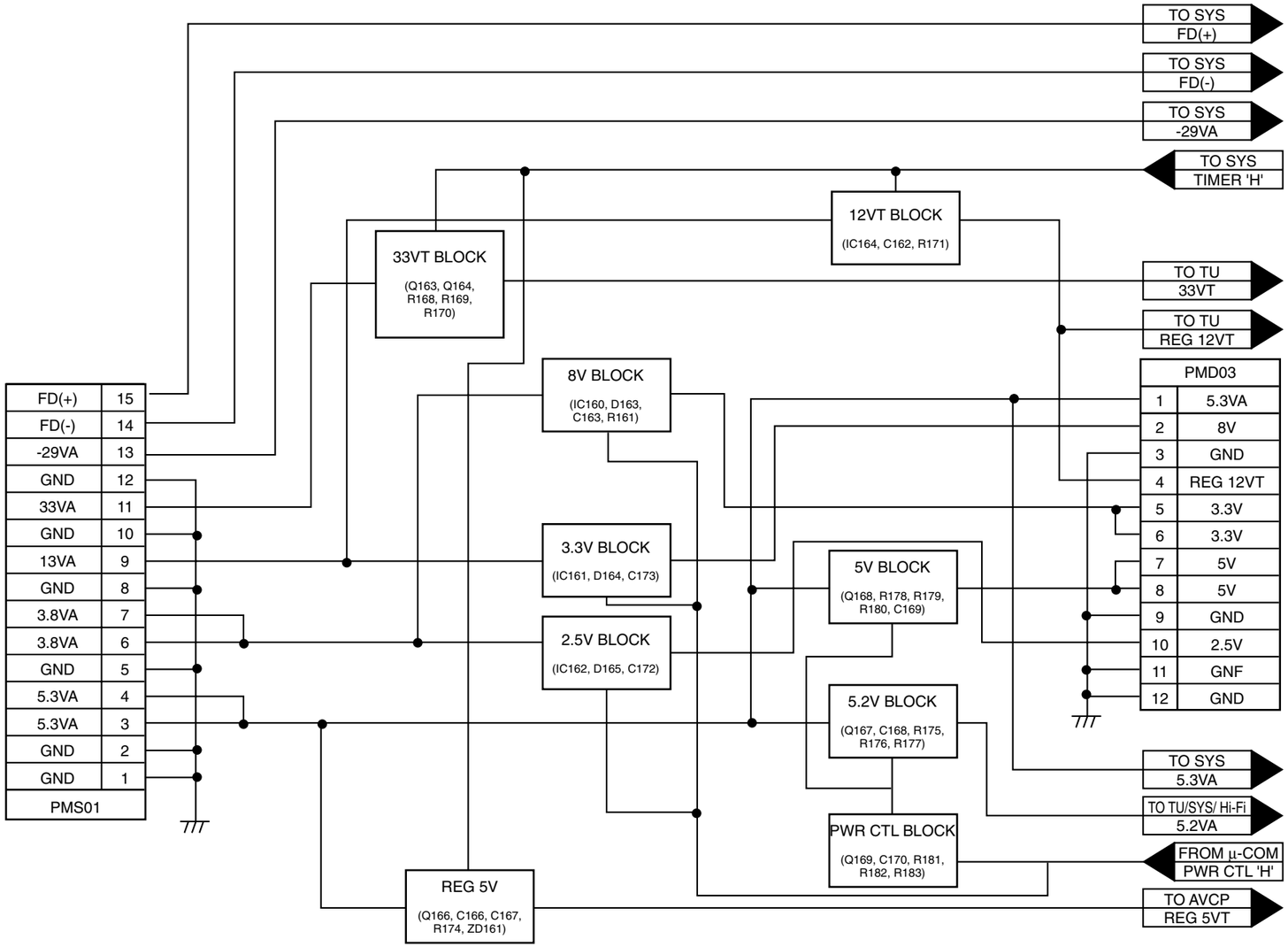
MEMO

BLOCK DIAGRAMS

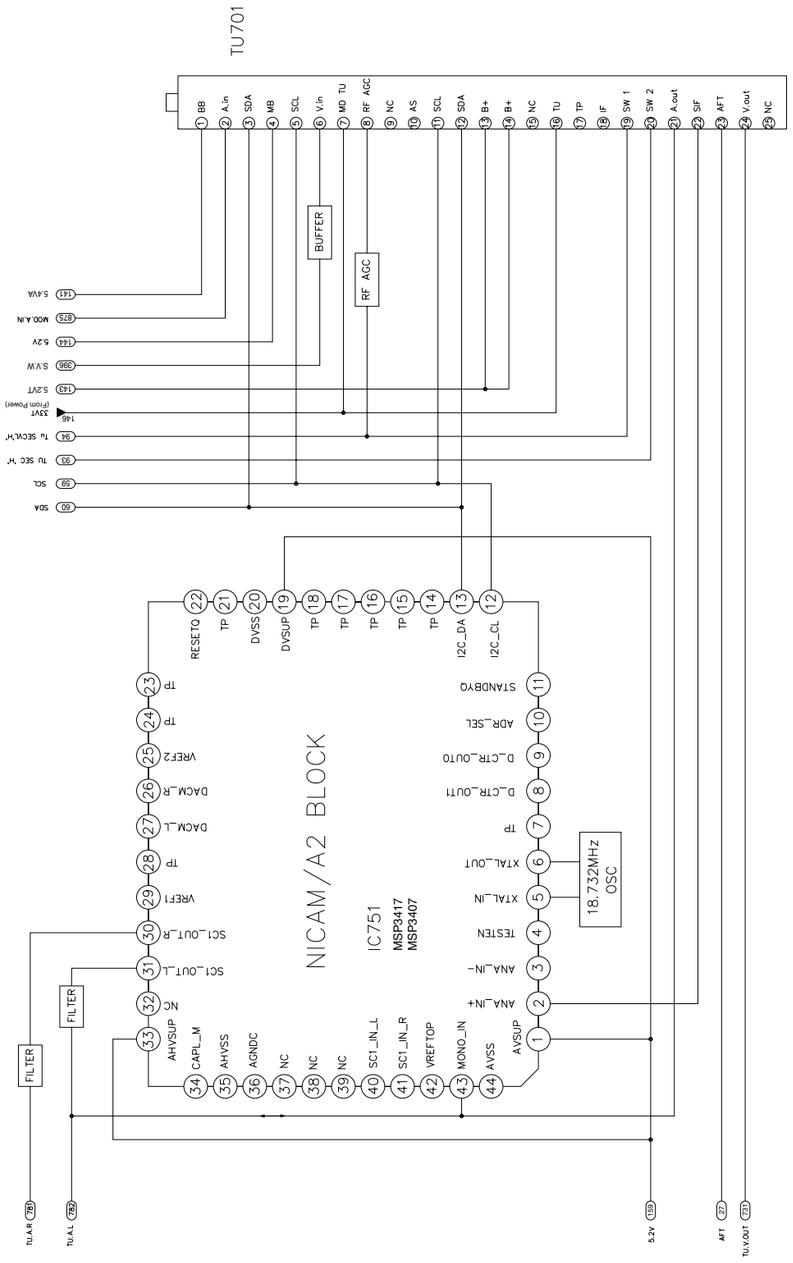
1. POWER(SMPS) BLOCK DIAGRAM 1



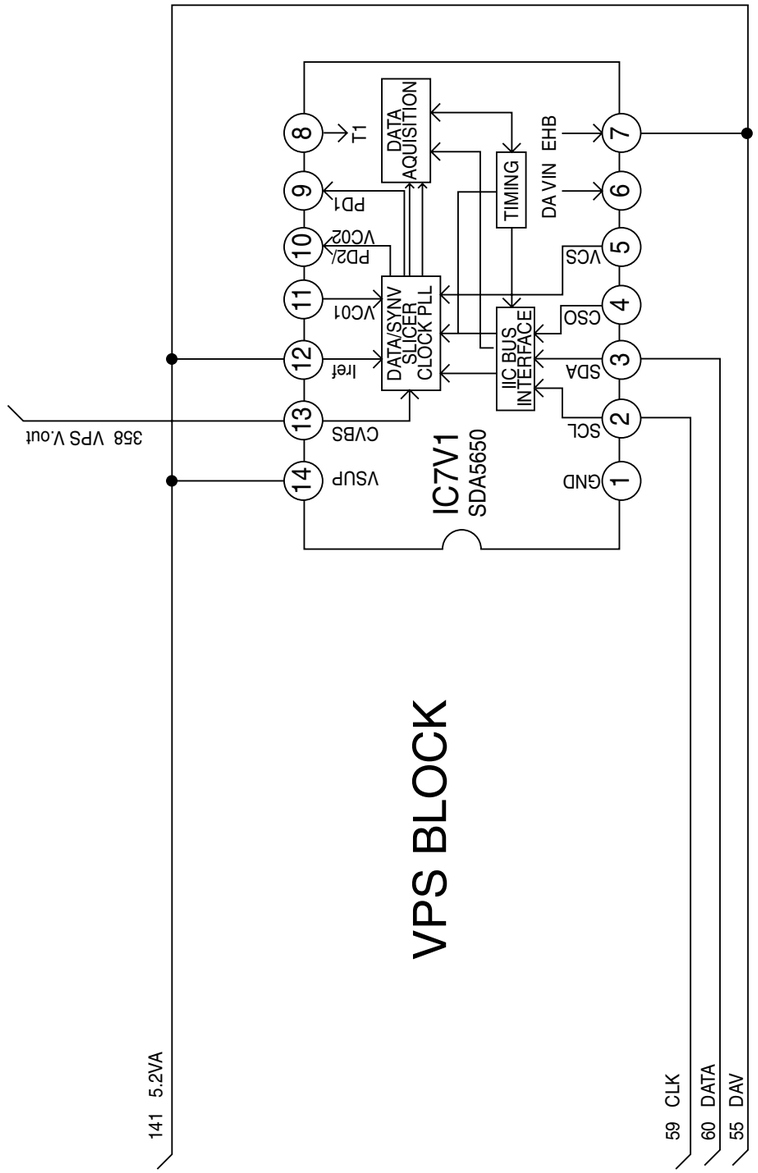
2. POWER(SMPS) BLOCK DIAGRAM 2



3. Tu/IF, NICAM & A2 BLOCK DIAGRAM



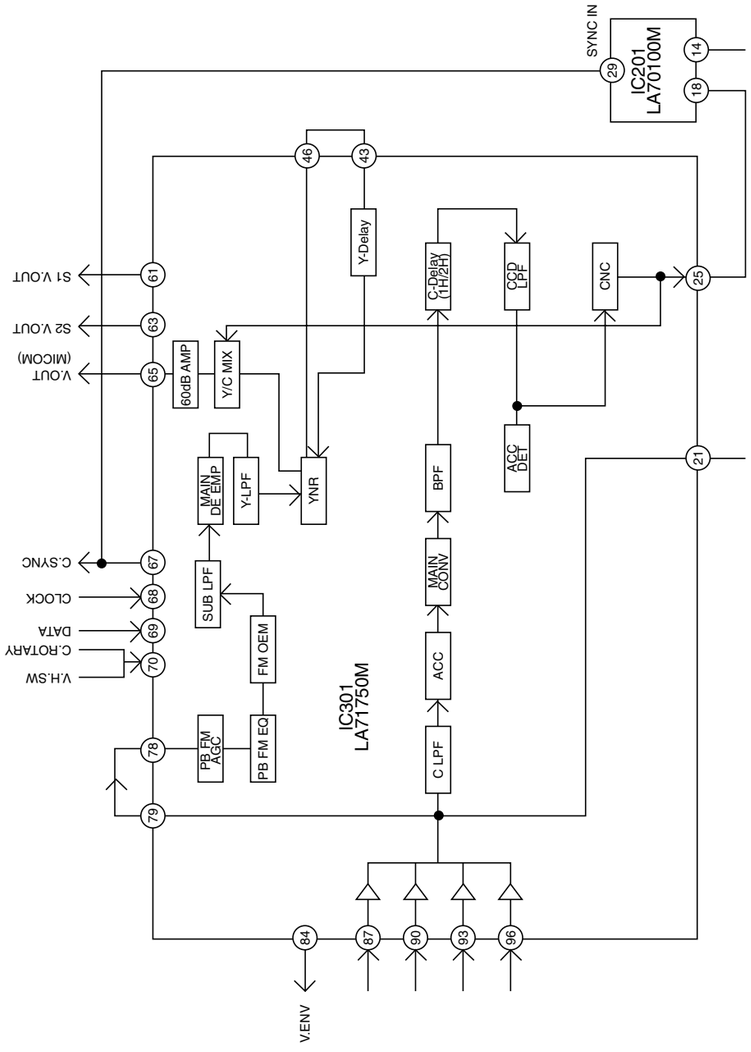
4. VPS BLOCK DIAGRAM



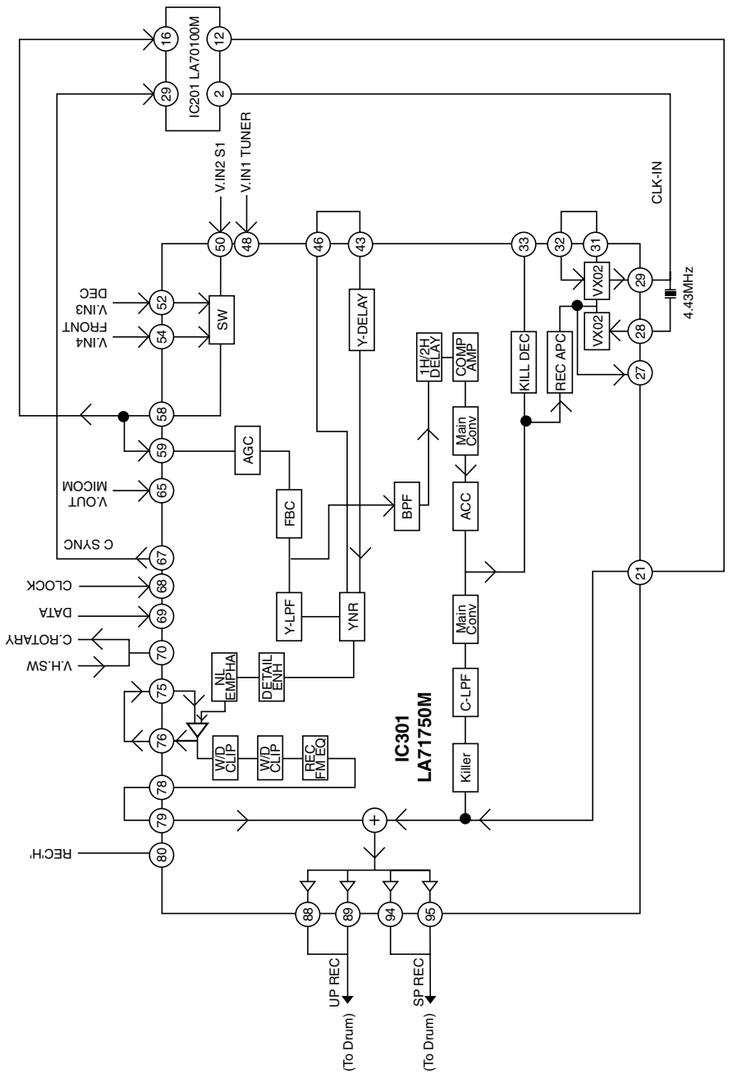
VPS BLOCK

5. Y/C BLOCK DIAGRAM

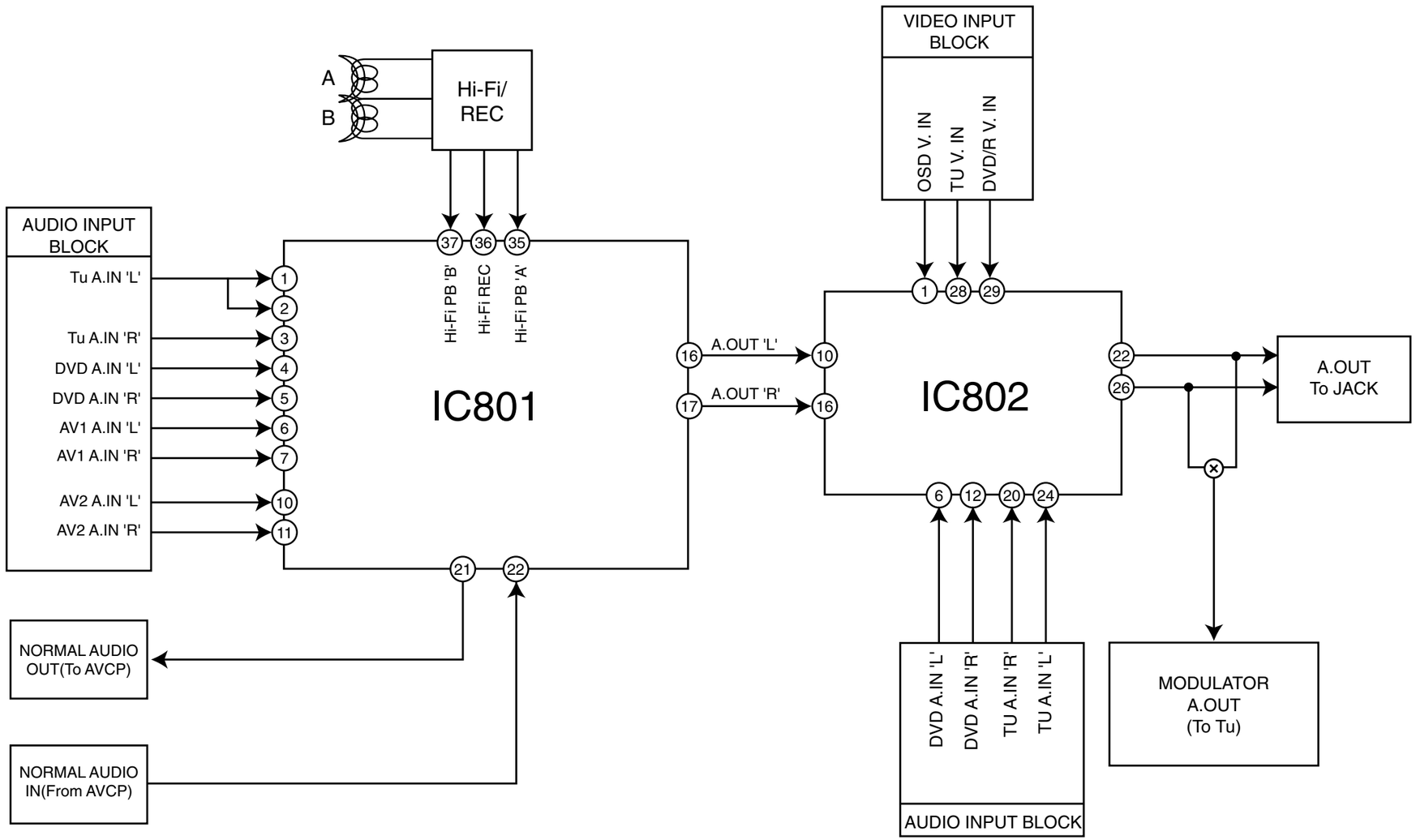
(PB MODE)



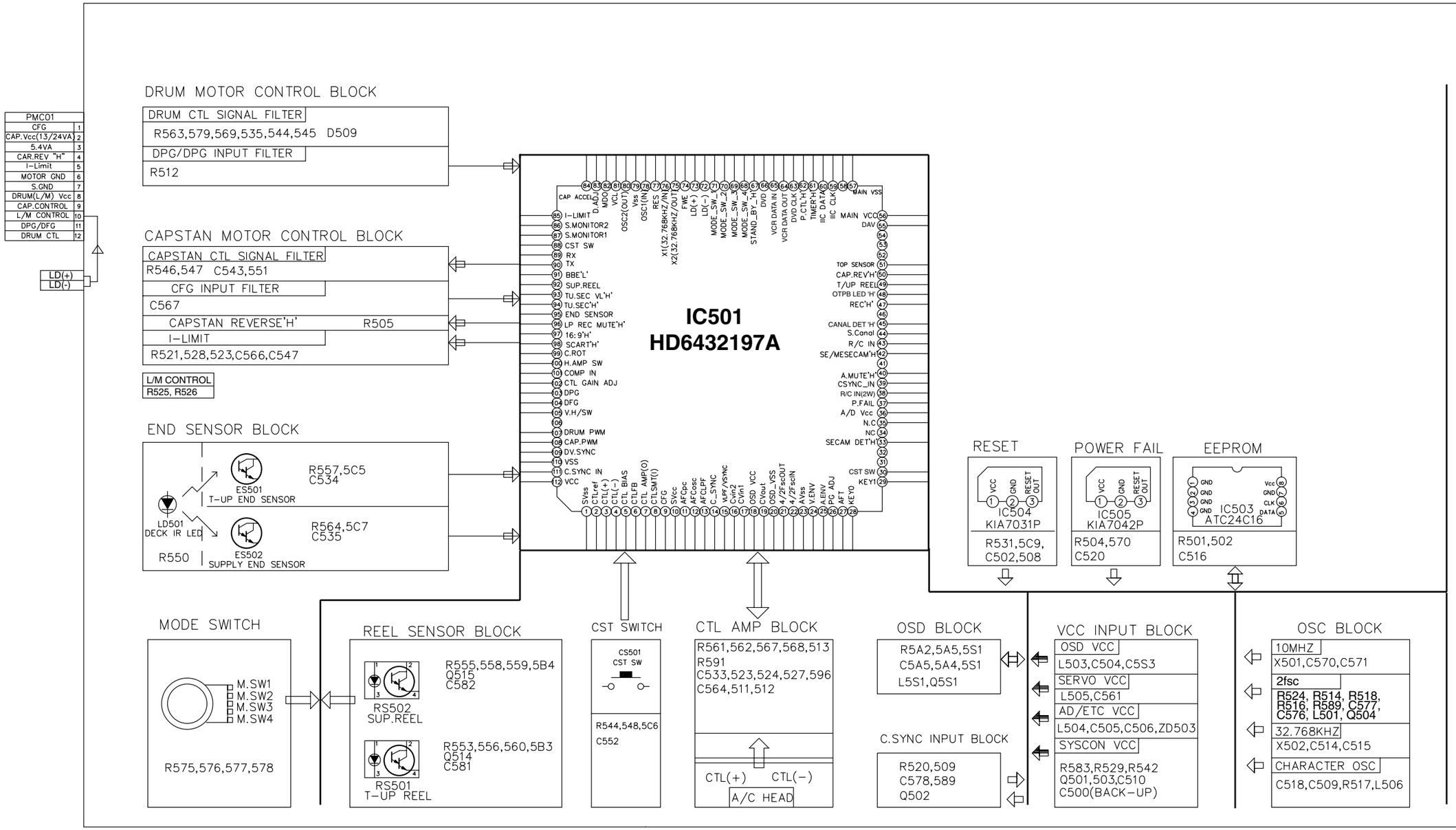
(REC MODE)



6. Hi-Fi BLOCK DIAGRAM



7. SYSTEM BLOCK DIAGRAM



CIRCUIT DIAGRAMS

1. POWER(SMPS) CIRCUIT DIAGRAM 1

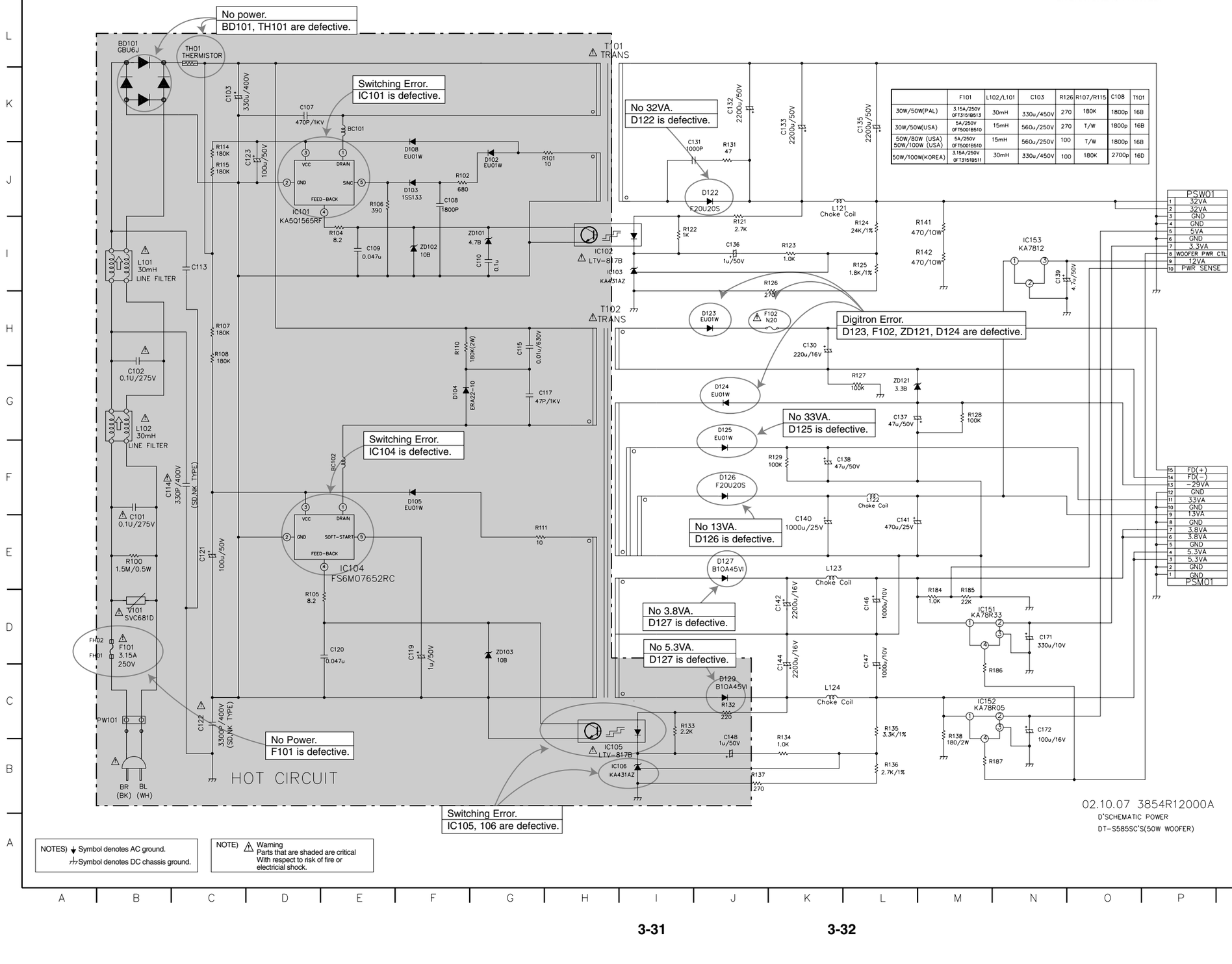
IMPORTANT SAFETY NOTICE

WHEN SERVICING THIS CHASSIS, UNDER NO CIRCUMSTANCES SHOULD THE ORIGINAL DESIGN BE MODIFIED OR ALTERED WITHOUT PERMISSION FROM THE LG ELECTRONICS CORPORATION. ALL COMPONENTS SHOULD BE REPLACED ONLY WITH TYPES IDENTICAL TO THOSE IN THE ORIGINAL CIRCUIT. SPECIAL COMPONENTS ARE SHADED ON THE SCHEMATIC FOR EASY IDENTIFICATION.

THIS CIRCUIT DIAGRAM MAY OCCASIONALLY DIFFER FROM THE ACTUAL CIRCUIT USED. THIS WAY, IMPLEMENTATION OF THE LATEST SAFETY AND PERFORMANCE IMPROVEMENT CHANGES INTO THE SET IS NOT DELAYED UNTIL THE NEW SERVICE LITERATURE IS PRINTED.

NOTE :

1. Shaded(■) parts are critical for safety. Replace only with specified part number.
2. Voltages are DC-measured with a digital voltmeter during Play mode.



	F101	L102/L101	C103	R126	R107/R115	C108	T101
30W/50W(PAL)	3.15A/250V 0FT3151B513	30mH	330u/450V	270	180K	1800p	16B
30W/50W(USA)	5A/250V 0FT5001B510	15mH	560u/250V	270	T/W	1800p	16B
50W/80W (USA) 50W/100W (USA)	5A/250V 0FT5001B510	15mH	560u/250V	100	T/W	1800p	16B
50W/100W(KOREA)	3.15A/250V 0FT3151B511	30mH	330u/450V	100	180K	2700p	16D

LOCATION GUIDE

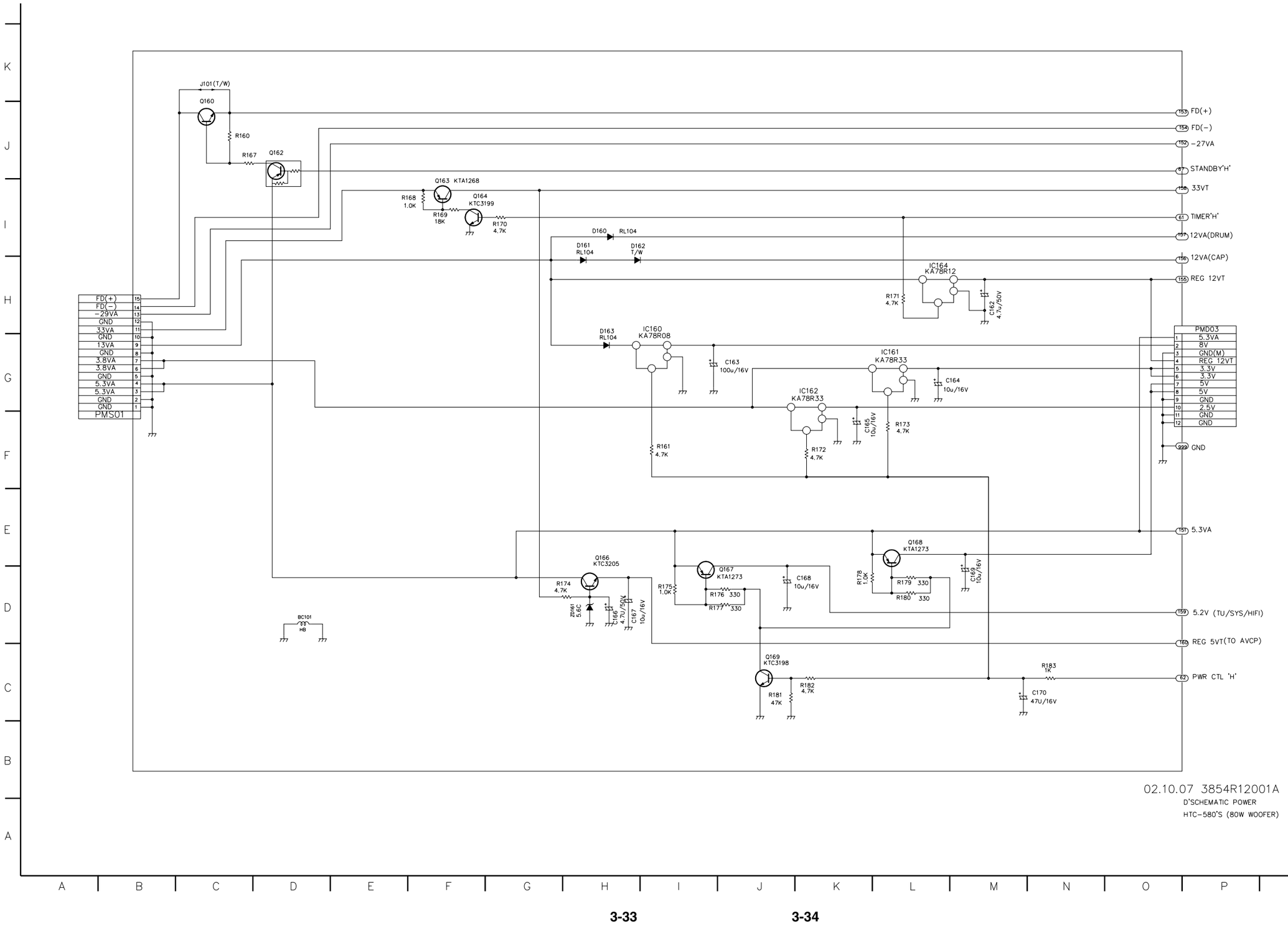
BC101	E11	R142	L9
BC102	E6	R184	M4
BD101	B12	R185	M4
C101	B5	R186	M3
C102	B7	R187	M2
C103	C11	T101	H12
C107	D11	T102	H8
C108	F10	TH01	C12
C109	E9	V101	B4
C110	G9	ZD101	F9
C113	C9	ZD102	F9
C114	B6	ZD103	G4
C115	G8	ZD121	L7
C117	G7		
C119	F4		
C120	E4		
C121	C5		
C122	C3		
C123	D10		
C130	K8		
C131	I10		
C132	J11		
C133	K11		
C135	L11		
C136	J9		
C137	L7		
C138	K6		
C139	N9		
C140	K5		
C141	L5		
C142	K4		
C144	K3		
C146	L4		
C147	L3		
C148	J2		
C171	N4		
C172	N3		
D102	G10		
D103	F10		
D104	F7		
D105	F6		
D108	F10		
D122	J10		
D123	J8		
D124	J7		
D125	J7		
D126	J6		
D127	J5		
D129	J3		
F102	J8		
FH01	A4		
FH02	A4		
IC101	D10		
IC102	H9		
IC103	H9		
IC104	E5		
IC105	H2		
IC106	H2		
IC151	M4		
IC152	M3		
IC153	N9		
L101	B9		
L102	B7		
L121	K10		
L122	L6		
L123	K5		
L124	K3		
PSM01	P5		
PSW01	P10		
PW101	B3		
R100	B5		
R101	G10		
R102	F10		
R104	E9		
R105	D4		
R106	C10		
R107	C8		
R108	C8		
R110	F8		
R111	G5		
R114	C10		
R115	C10		
R121	J9		
R122	I9		
R123	K9		
R124	L9		
R125	L9		
R126	J9		
R127	L7		
R128	M7		
R129	K6		
R131	J10		
R132	J3		
R133	I3		
R134	K2		
R135	L3		
R136	L2		
R137	J2		
R138	M3		
R141	L9		

02.10.07 3854R12000A
D'SCHEMATIC POWER
DT-S585SC'S(50W WOOFER)

NOTES) ⏚ Symbol denotes AC ground.
⏚ Symbol denotes DC chassis ground.

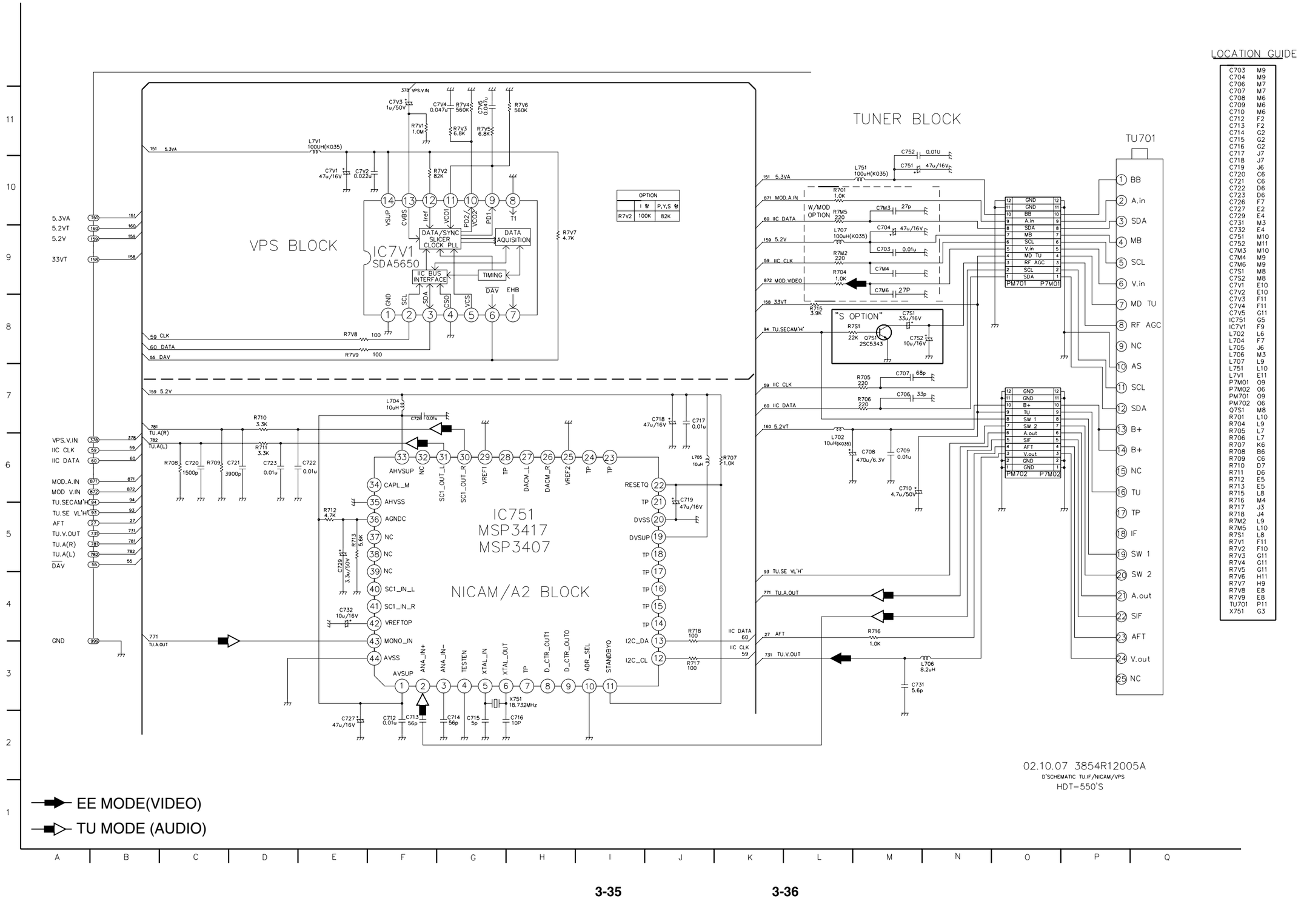
NOTE) ⚠ Warning
Parts that are shaded are critical With respect to risk of fire or electricial shock.

2. POWER(SMPS) CIRCUIT DIAGRAM 2

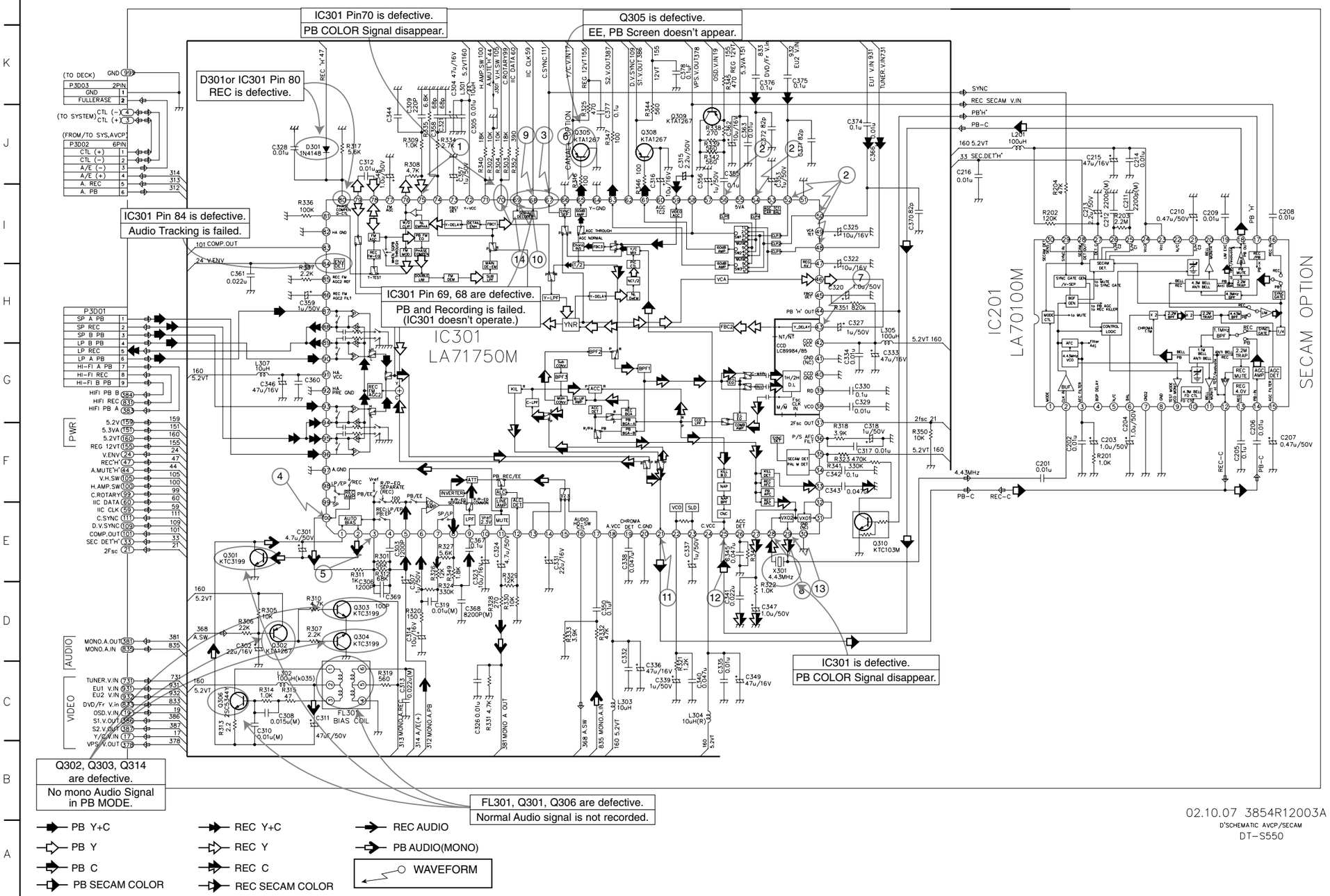


02.10.07 3854R12001A
D'SCHEMATIC POWER
HTC-580'S (80W WOOFER)

3. TU/IF, NICAM & A2 CIRCUIT DIAGRAM



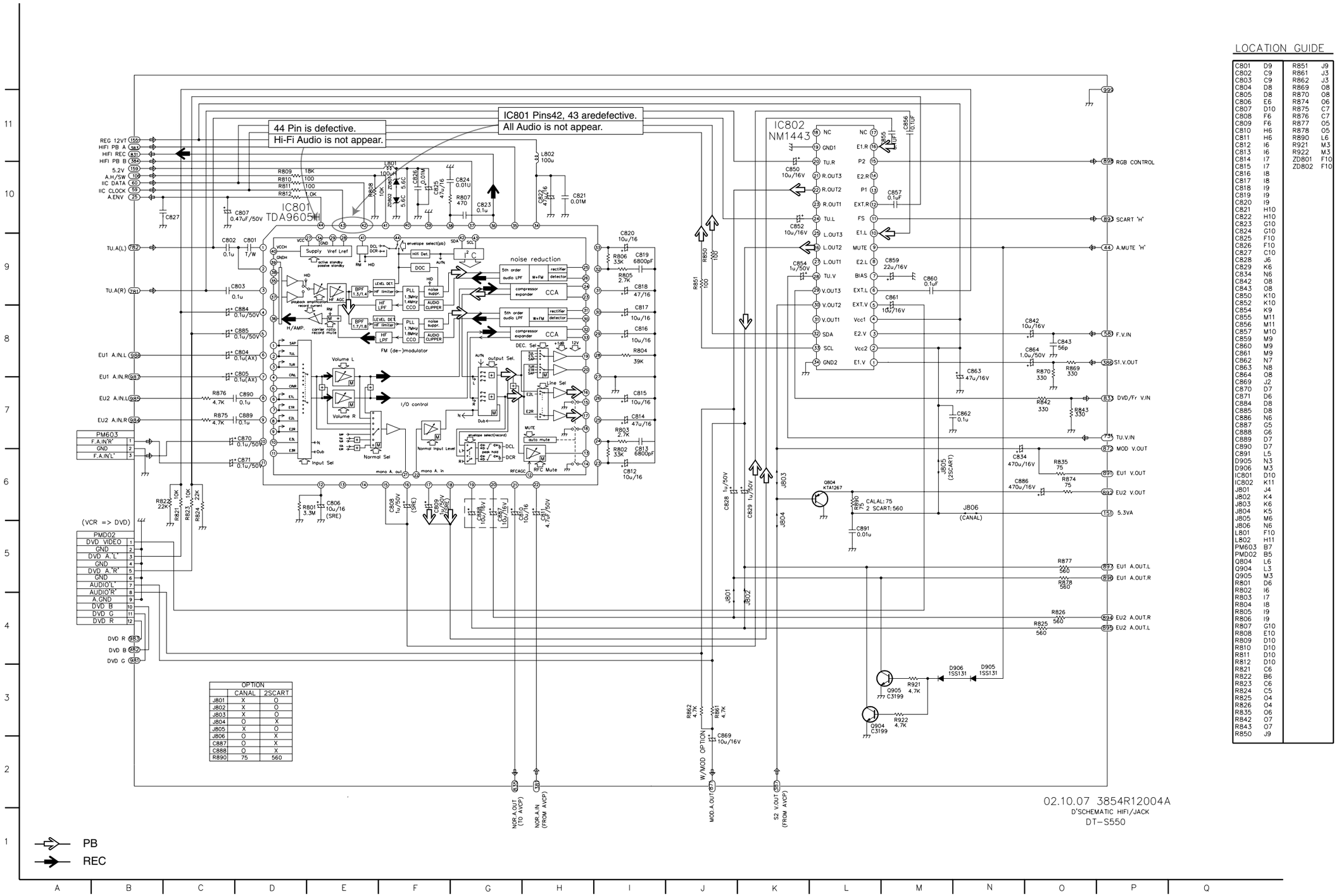
4. A/V CIRCUIT DIAGRAM



LOCATION GUIDE

C201	M6	P3D01	A8
C202	N6	P3D02	A10
C203	N6	P3D03	A11
C204	N6	Q301	C5
C205	P6	Q302	D4
C206	P6	Q303	E4
C207	P6	Q304	E4
C208	P9	Q305	G10
C209	Q9	Q306	C3
C210	Q9	Q308	H10
C211	N9	Q309	I10
C212	N9	Q310	K5
C213	N9	R201	N6
C214	O10	R202	M9
C215	N10	R203	N9
C216	L10	R204	N9
C301	D5	R301	E5
C302	C4	R302	F10
C303	E5	R303	G10
C304	F11	R304	C10
C305	F10	R305	D4
C306	E4	R306	C4
C307	E4	R307	D4
C308	D3	R308	E10
C309	E10	R309	E10
C310	C3	R310	D4
C311	D3	R311	E5
C312	E10	R312	E5
C313	E3	R313	C3
C314	E4	R314	D3
C315	I10	R315	D3
C316	H9	R316	H9
C317	K6	R317	E10
C318	K6	R318	K6
C319	F4	R319	E3
C320	K8	R320	E4
C321	F10	R321	I3
C322	K9	R322	J4
C323	F4	R323	K6
C324	G5	R324	F4
C325	K9	R325	H10
C326	F3	R326	F5
C327	K8	R327	F5
C328	D10	R328	F4
C329	K7	R329	G5
C330	K7	R330	G4
C331	G5	R331	F3
C332	H3	R332	H4
C333	K7	R333	G4
C334	K7	R334	F10
C335	I3	R335	F10
C336	H3	R336	D9
C337	I5	R337	D8
C338	H5	R338	I10
C339	H3	R339	I10
C340	I3	R340	F10
C341	I4	R341	K6
C342	K6	R342	I10
C343	K6	R344	H10
C344	E10	R345	I11
C345	I5	R346	H9
C346	D7	R347	H10
C347	J4	R348	J5
C348	E9	R349	F5
C349	J3	R350	L6
C350	H4	R351	K8
C353	J9	R352	G10
C355	I10	X301	J5
C356	I9		
C357	F10		
C358	F10		
C359	D8		
C360	D7		
C361	C8		
C362	I10		
C363	J10		
C366	K10		
C367	F5		
C368	F4		
C369	E4		
C370	L9		
C371	J10		
C372	J10		
C374	K10		
C375	J11		
C376	J11		
C377	H10		
C378	I11		
D301	D10		
FL301	E3		
IC201	M8		
IC301	F8		
J301	G11		
L201	M10		
L301	F11		
L302	D3		
L303	H3		
L304	I3		
L305	K8		
L307	C7		

5. Hi-Fi CIRCUIT DIAGRAM



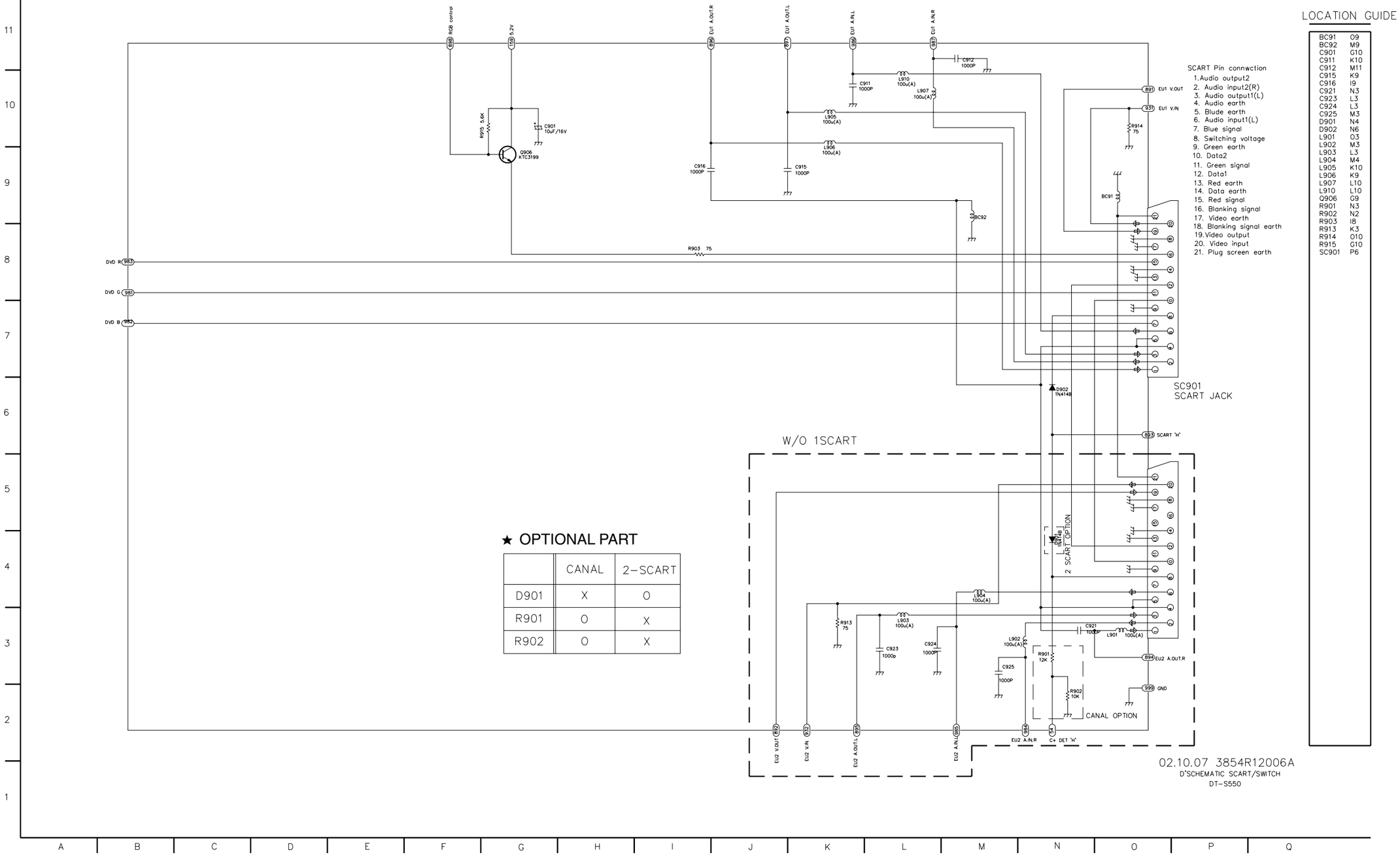
OPTION		
	CANAL	2SCART
J801	X	O
J802	X	O
J803	X	O
J804	O	X
J805	X	O
J806	O	X
C887	O	X
C888	O	X
R890	75	560

LOCATION GUIDE

C801	D9	R851	J9
C802	C9	R861	J3
C803	C9	R862	J3
C804	D8	R869	O8
C805	D8	R870	O8
C806	E6	R874	O6
C807	D10	R875	C7
C808	F6	R876	C7
C809	F6	R877	O5
C810	H6	R878	O5
C811	H6	R890	L6
C812	I6	R921	M3
C813	I6	R922	M3
C814	I7	ZD801	F10
C815	I7	ZD802	F10
C816	I8		
C817	I8		
C818	I9		
C819	I9		
C820	I9		
C821	H10		
C822	H10		
C823	G10		
C824	G10		
C825	F10		
C826	F10		
C827	C10		
C828	J6		
C829	K6		
C834	N6		
C842	O8		
C843	O8		
C850	K10		
C852	K10		
C854	K9		
C855	M11		
C856	M11		
C857	M10		
C859	M9		
C860	M9		
C861	M9		
C862	N7		
C863	N8		
C864	O8		
C869	J2		
C870	D7		
C871	D6		
C884	D8		
C885	D8		
C886	N6		
C887	G5		
C888	G6		
C889	D7		
C890	D7		
C891	L5		
D905	N3		
D906	M3		
IC801	D10		
IC802	K11		
J801	J4		
J802	K4		
J803	K6		
J804	K5		
J805	M6		
J806	N6		
L801	F10		
L802	H11		
PM603	B7		
PMD02	B5		
Q804	L6		
Q904	L3		
Q905	M3		
R801	D6		
R802	I6		
R803	I7		
R804	I8		
R805	I9		
R806	I9		
R807	G10		
R808	E10		
R809	D10		
R810	D10		
R811	D10		
R812	D10		
R821	C6		
R822	B6		
R823	C6		
R824	C5		
R825	O4		
R826	O4		
R835	O6		
R842	O7		
R843	O7		
R850	J9		

02.10.07 3854R12004A
D'SCHEMATIC HIFI/JACK
DT-S550

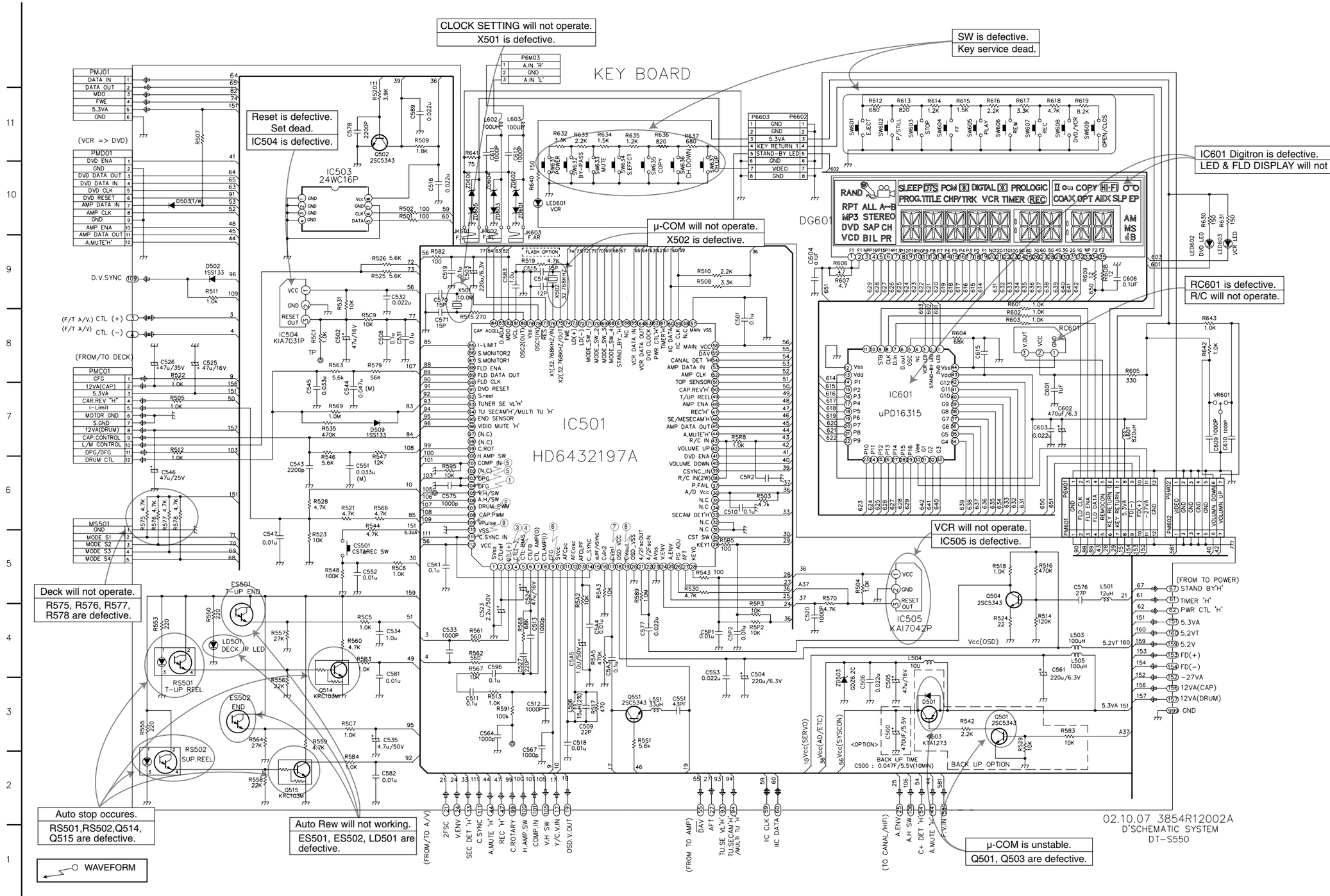
6. SCART(JACK) CIRCUIT DIAGRAM



★ OPTIONAL PART

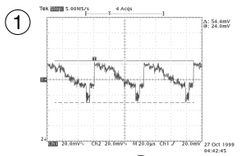
	CANAL	2-SCART
D901	X	O
R901	O	X
R902	O	X

7. SYSTEM CIRCUIT DIAGRAM

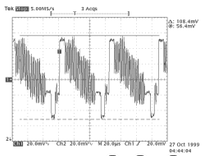


WAVEFORM & VOLTAGE SHEET

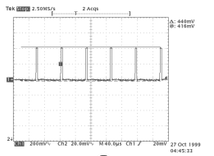
★ IC301 Oscilloscope Waveform

① 

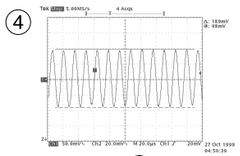
IC301 Pin ㉕
PB mode
500mvp-p

② 

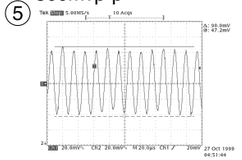
IC301 Pins ㊽, ㊿, ㊿㉒, ㊿㊏
Video in 1Vp-p

③ 

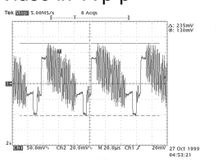
IC301 Pin ㊼
PB/REC mode
4.0Vp-p

④ 

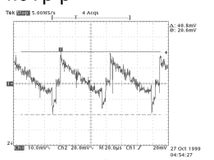
IC301 Pin ㊿
REC mode
1.1Vp-p

⑤ 

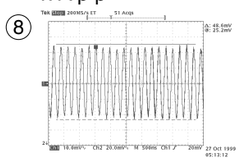
IC301 Pin ③
REC mode
2.0Vp-p

⑥ 

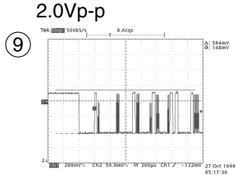
IC301 Pin ㊺
PB mode
2.02Vp-p

⑦ 

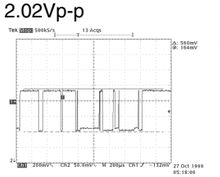
IC301 Pin ㊸
PB mode
400mVp-p

⑧ 

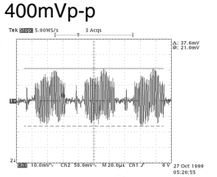
IC301 Pin ㉘
PB mode
400mVp-p

⑨ 

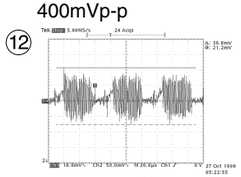
IC301 Pin ㊽
PB/REC mode
5Vp-p

⑩ 

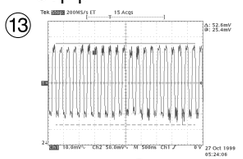
IC301 Pin ㊾
PB/REC mode
5Vp-p

⑪ 

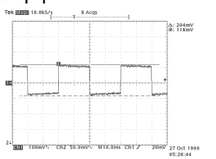
IC301 Pins ㉑
REC mode
340mVp-p

⑫ 

IC301 Pins ㉕
PB mode
300mVp-p

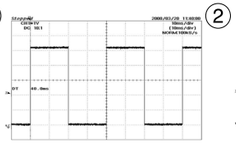
⑬ 

IC301 Pin ㉙
PB mode
400mVp-p

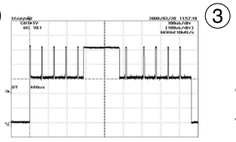
⑭ 

IC301 Pin ㊿
PB mode
3.6Vp-p

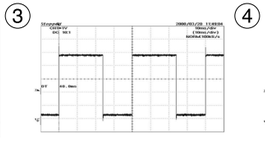
* IC501 Waveform Photographs

① 

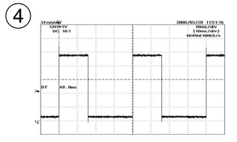
V.HSW
(IC501 Pin 105)
1V/10mS
REC/PB MODE

② 

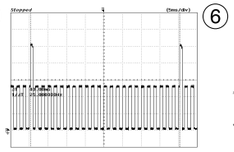
DV.SYNC
(IC501 PIN 109)
1V/100uS
QUE/REV MODE

③ 

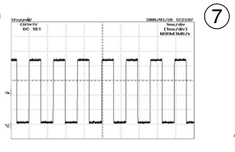
CTL(+)
(IC501 Pin 3)
1V/10mS

④ 

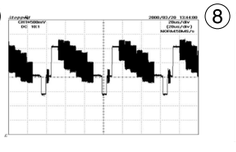
CTL(-)
(IC501 Pin4)
1V/10mS

⑤ 

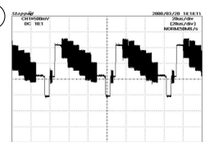
DFG/FG
(IC501 PIN 103,104)
1V/10mS
REC/PB MODE

⑥ 

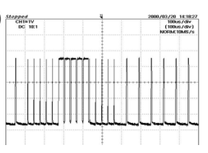
CFG
(IC501 Pin9)
1V/10mS

⑦ 

V.IN
(IC501 Pin 17)
500mV/20uS

⑧ 

V.OUT
(IC501 Pin 19)
500mV/20uS
EE/PB MODE

⑨ 

C.SYNC
(IC501 Pin 111)
1.0V/100uS
EE/PB MODE

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	EE	PB	REC
IC201			
1	2.4	2.4	2.4
2	2.3	2.4	2.4
3	3.4	3.4	3.4
4	2.5	2.4	2.4
5	0	0	0
6	0.5	3.7	0.5
7	0	0	0
8	0	0	0
9	2.9	2.9	2.9
10	2.4	2.4	2.4
11	2.1	2.4	2.4
12	3.1	1.8	2.3
13	4	4	3
14	2.4	2.4	4
15	3.0	1.8	2.4
16	3.2	3.1	3.2
17	0	4	0
18	0	3.3	0.12
19	2.2	2.2	2.2
20	2.1	2.5	2.3
21	1.9	2.3	2.3
22	0	0	0
23	4.8	4.8	4.8
24	4.8	4.8	4.8
25	2.3	2.2	1.5
26	2.3	2.2	2.4
27	2.9	2.7	2.9
28	0.1	0.18	0.18
29	0.19	0.3	3.8
30	2	2	2
IC301			
1	4.9	4.9	1
2	0	0	0.8
3	2.2	2.2	2.3
4	pulse	pulse	0.6
5	2.1	2.1	2.3
6	2.2	2.1	2.2
7	2.1	2.1	2.2
8	2.1	2.1	2.2
9	2.1	2.1	2.9
10	2.2	2.1	2.2
11	2.2	2.2	2.2
12	0	0	0
13	2.1	2.1	2.2
14	0	0	1
15	2.1	2.1	2.2
16	4.9	0.1	4.8
17	2.1	2.1	2.2
18	4.9	4.9	4.9
19	4.0	3.8	2.8
20	0	0	0
21	3.1	1.8	2
22	2.7	2.6	3.4
23	2.7	2.6	3.4

MODE / PIN NO.	EE	PB	REC
24	4.9	4.9	4.9
25	0.1	3.3	0.12
26	1.5	2.2	1.2
27	2	2.0	2
28	4	4	4
29	2.6	2.6	2.6
30	0	0	0
31	4.5	4.4	4.5
32	4.4	4.4	4.5
33	2.9	2	1.9
34	0	0	1.8
35	1.8	1.8	1.8
36	2.9	3.5	3.6
37	1.8	1.8	1.8
38	2	2	2
39	9	9	9
40	0	0	0
41	0	0	0
42	4.9	4.9	4.9
43	2.4	2.2	2.3
44	0	3.9	2.8
45	2.4	2.4	2.5
46	2.6	2.5	2.6
47	4	4	4
48	4.2	4.2	4.2
49	2.9	3.6	3
50	1.9	1.9	1.95
51	0	0	0
52	1.9	1.9	1.95
53	2.3	2.2	2.3
54	1.9	1.9	2.2
55	5.2	5.2	5.2
56	2.2	2.0	2
57	1.9	2.3	1.6
58	3.6	1.3	2.2
59	2.8	2.8	2.8
60	1.5	1.5	1.4
61	1.8	1.3	1.3
62	0	0	0
63	1.8	1.3	1.6
64	0	0	0
65	1.7	1.1	1.1
66	0	0	0
67	0.2	3.7	0.4
68	4.8	4.9	4.8
69	4.7	4.8	4.8
70	0	pulse	2.6
71	3.3	0	0
72	4.9	4.8	4.8
73	2	3.3	2.2
74	2.4	1.6	2.3
75	2.3	0.6	2.3
76	2.3	0.7	2.3
77	1.5	1.5	1.5
78	2.5	3.3	2.5

MODE / PIN NO.	EE	PB	REC
79	1.8	1.7	2.5
80	0.9	0.9	4.6
81	1.0	1	1
82	0	0	0
83	pulse	0	0
84	0.5	2.6	0
85	0	0	1.3
86	0.27	0.3	2
87	0.7	0.7	0.7
88	0.7	0.7	0.7
89	0.7	0.7	0.7
90	0.7	0.7	0.7
91	4.9	4.9	4.8
92	0	0	0
93	1.7	1.7	4
94	1.7	1.7	4
95	1.7	1.7	4
96	1.7	1.7	4
97	0	0	0
98	2.2	2.2	2.2
99	2.2	2.2	2.2
100	2.2	2.2	2.2
IC501			
1	0	0	0
2	2.6	2.6	2.6
3	2.6	2.6	3.5
4	2.6	2.6	1.3
5	2.6	2.6	2.6
6	2.6	2.6	2.6
7	2.7	2.7	2.7
8	2.58	2.5	2.5
9	4.52	2.2	2.2
10	5.2	5.2	5.2
11	1.8	1.8	1.7
12	1.8	1.8	0
13	2.0	2.1	2
14	0.26	3.9	0.4
15	0.27	pulse	0.16
16	1.9	1.9	1.8
17	2.47	1.4	2.4
18	4.93	0	4.8
19	2.26	0	1.7
20	0	0	0
21	2.3	0	2.3
22	2.3	2.3	2.2
23	0	0	0
24	0.52	2.6	0
25	0.078	3.1	0.16
26	5.2	0	5.2
27	4.5	4.5	4.5
28	0	5.2	5.2
29	0	0	0
30	0	0	0
31	0	0	0
32	0	0	0

MODE / PIN NO.	EE	PB	REC
33	0.18	0.18	0.16
34	0.26	0	0.16
35	5.2	5.2	5.2
36	5.2	5.2	5.2
37	4.8	0	0
38	4.8	4.8	4.8
39	0.21	0	2.3
40	5.18	0	0
41	3.1	0	0
42	0	0	0
43	0	4.8	4.8
44	0	0	0
45	0	0	0
46	0	0	0
47	0	0	5.1
48	0	0	0
49	0	pulse	0
50	0	0	0.1
51	0	0	0.1
52	pulse	0	0.26
53	pulse	0	0.26
54	5.2	0	5.1
55	pulse	0	0
56	5.2	5.2	0
57	0	0	0
58	0	0	0
59	4.9	0	0
60	4.7	0	4.7
61	5.1	5.1	5.1
62	5.1	0.2	5.1
63	5	5	5
64	3.58	3.5	3.6
65	2.8	pulse	0
66	5.1	5.1	0.2
67	0	0	5.1
68	0	5.2	0
69	0	5.2	5.2
70	5.2	5.2	5.2
71	5.2	0	5.2
72	0	0	0
73	0.3	5.1	5.1
74	0	0	0
75	0	0	1.6
76	1.36	1.3	1.3
77	0	0	0
78	0	0	2.5
79	0	0	0
80	0	0.15	0
81	3.3	3.3	3.3
82	5.2	5.2	0
83	0	2.5	2.5
84	0	2.7	2.7
85	0	3.5	3.6
86	pulse	pulse	2.8
87	0	pulse	3.1

MODE / PIN NO.	EE	PB	REC
88	4.8	4.8	4.8
89	0	0	0
90	0	4.9	0
91	4.95	0	0
92	0	0	pulse
93	0	0	0
94	0	0	0
95	0	0	0
96	0	0	0
97	0	0	0
98	0	5.1	5.2
99	0	2.5	2.6
100	0	0	0
101	0	0	0.29
102	0	0	0
103	0	1.4	1.38
104	0	pulse	1.39
105	0	2.5	2.6
106	0	2.5	2.6
107	0	0	0
108	0	0	2.7
109	pulse	0	0
110	pulse	0	0
111	0.26	0	0
112	5.2	0	0
IC751			
1	5.1	5.1	5.1
2	1.5	1.5	1.5
3	1.5	1.5	1.5
4	0	0	0
5	2.4	2.4	2.4
6	2.3	2.3	2.3
7	0.2	pulse	pulse
8	0	0	pulse
9	0	0	pulse
10	0	0	0
11	5.1	5.1	5.1
12	4.8	4.8	4.8
13	4.7	4.7	4.8
14	2.5	2.5	pulse
15	2.5	2.5	pulse
16	0	0	pulse
17	pulse	pulse	pulse
18	0.23	pulse	pulse
19	5.14	5.1	5.1
20	0	0	0
21	pulse	pulse	pulse
22	5.1	5.1	5.1
23	0	0	0
24	0	0	0
25	0	0	0
26	0	0	0
27	0	0	0
28	0	0	0
29	0	0	0

MODE / PIN NO.	EE	PB	REC
30	2.8	2.8	2.8
31	2.8	2.8	2.8
32	0	0	0
33	5.1	5.1	5.1
34	4.2	4.2	4.2
35	0	0	0
36	2.8	2.8	2.8
37	0	0	0
38	0	0	0
39	0	0	0
40	2.8	2.8	2.8
41	2.8	2.8	2.8
42	2.5	2.5	2.6
43	2.4	2.4	2.4
44	0	0	0
IC801			
1	3.8	3.8	3.8
2	3.8	3.8	3.8
3	3.8	3.8	3.8
4	3.8	3.8	3.8
5	3.8	3.8	3.8
6	3.8	3.8	3.8
7	3.8	3.8	3.8
8	3.8	3.8	3.8
9	3.8	3.8	3.8
10	3.8	3.8	3.8
11	3.8	3.8	3.8
12	0	0	0
13	3.87	3.87	3.8
14	0	0	0
15	0	0	0
16	6	6	6
17	6	6	6
18	0	0	0
19	6	6	6
20	6	6	6
21	4.57	4.5	4.5
22	3.82	3.8	3.8
23	3.86	3.8	3.8
24	3.87	3.8	3.8
25	3.87	3.8	3.8
26	0.8	0.8	0.8
27	0	0	0
28	3.84	3.8	3.8
29	3.86	3.8	3.8
30	0.79	0.7	0.8
31	3.87	3.8	3.9
32	3.87	3.8	3.9
33	3.86	3.8	3.9
34	12	12	12
35	0.6	0.6	4.2
36	0.63	0.6	4.2
37	0.63	0.6	4.2
38	0	0	4.2
39	0	0	0

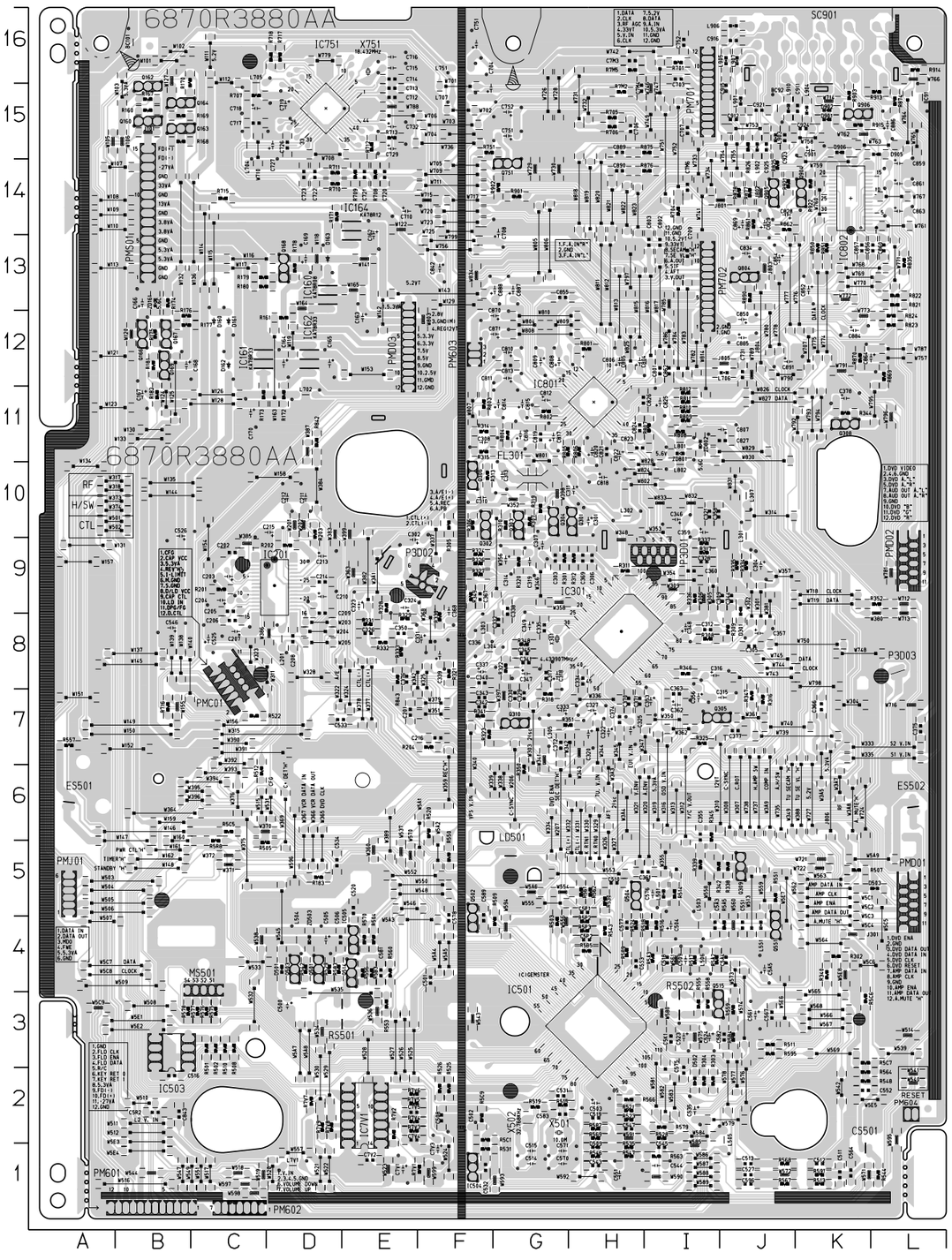
MODE / PIN NO.	EE	PB	REC
40	5	5	5
41	0	0.9	0.9
42	4.7	4.7	4.8
43	4.8	4.6	4.8
44	0	3.3	0.7
IC802			
1	3	3.1	2.9
2	12	12	12
3	2.7	2.7	2.7
4	12	12	12
5	2.9	2.9	3
6	5.7	5.7	5.7
7	5.7	5.7	5.7
8	0	5.6	5.7
9	5.1	0	0
10	5.6	5.6	5.7
11	11.4	11.4	11.5
12	5.7	5.7	5.7
13	0	0	1.6
14	5.6	5.6	2.7
15	0.1	0.1	5.7
16	5.6	5.6	0
17	0	0	0
18	0	0	0
19	0	0	5.7
20	5.7	5.7	5.7
21	5.7	5.7	5.7
22	5.7	5.7	5.7
23	5.6	5.6	5.7
24	5.7	5.7	5.7
25	5.7	5.7	5.7
26	5.7	5.7	5.7
27	5.6	5.6	5.2
28	5.2	5.2	2.3
29	1.4	1.4	1.8
30	2.1	2.3	3.5
31	3.5	3.5	3.5
32	4.7	4.7	4.8
33	4.8	4.8	4.9
34	0	0	0
IC901			
1	3.6	3.1	1.5
2	0.1	0.1	2.6
3	0.8	0.8	0.85
4	0	0	0
5	0.7	0.7	0.85
6	0.7	0.7	0.79
7	0.1	0.1	2.6
8	1.4	1.4	1.5
9	3.0	2.8	1.5
10	0	0	0
11	1.4	1.5	0
12	0.1	0.1	2.6
13	5.2	5.2	5.2
14	2.6	2.6	1.6

MODE / PIN NO.	EE	PB	REC
15	0	0	0
16	1.5	1.5	1.6

Transistor	EE Mode			PB Mode			REC Mode		
	E	C	B	E	C	B	E	C	B
Q110	-22	-22	-21	-21.8	-21.8	-21	-22	-22	-21
Q111	5.23	5.1	0	5.24	5.1	0	5.23	5	0
Q112	12.1	13.9	12.7	12	13.5	12.7	12.1	13.4	12.7
Q113	5.24	5.18	4.46	5.24	5.18	4.46	5.24	5.17	4.47
Q114	33.6	33.5	32.8	33.4	33.2	32.4	33.5	33.3	32.5
Q115	0	0	0.74	0	0	0.74	0	0	0.74
Q116	5.24	5.2	4.48	5.2	5.2	4.49	5.2	5.2	4.48
Q117	5	5.23	5.7	5	5.24	5.7	5	5.2	5.7
Q118	0	0	0.68	0	0	0.67	0	0	0.68
Q301	0	4.9	0	0	4.9	0	0	1.6	0.8
Q302	4.9	0	4.9	4.9	4.86	4.25	4.9	-14.4	4.9
Q303	0.2	0	0	0	0	0.7	-7.8	0	-14.3
Q304	0.13	0	-0.13	0	0	0.7	-7.8	0	-14.3
Q305	2.5	0	1.8	2.7	0	2	3	0	2.3
Q306	4.9	4.9	4.9	4.9	4.9	4.9	1.9	4.6	2.2
Q308	2.6	0	1.9	2.8	0	2.1	3	0	2.4
Q309	2.9	0	2.3	3.2	0	2.5	3.5	0	2.8
Q501	0	0	0.68	0	0	0.68	0	0	0.67
Q502	0	3.7	0.23	0	2.4	0.23	0	2.4	0.2
Q503	5.2	5.2	4.5	5.23	5.2	4.5	5.2	5.2	4.5
Q504	0	3.8	0.62	0	3.8	0.6	0	3.7	0.6
Q514	0	5.2	0	0	Pulse	Pulse	0	Pulse	Pulse
Q515	0	0	4.95	0	Pulse	Pulse	0	Pulse	Pulse
Q5S1	0.36	2.52	0	0	2.5	0	0.5	3	0
Q751	0	3.8	0	0	3.8	0	0	3.7	0
Q804	2.6	0	1.9	2.8	0	2	3.1	0	2.4

PRINTED CIRCUIT DIAGRAMS

1. MAIN P.C.BOARD

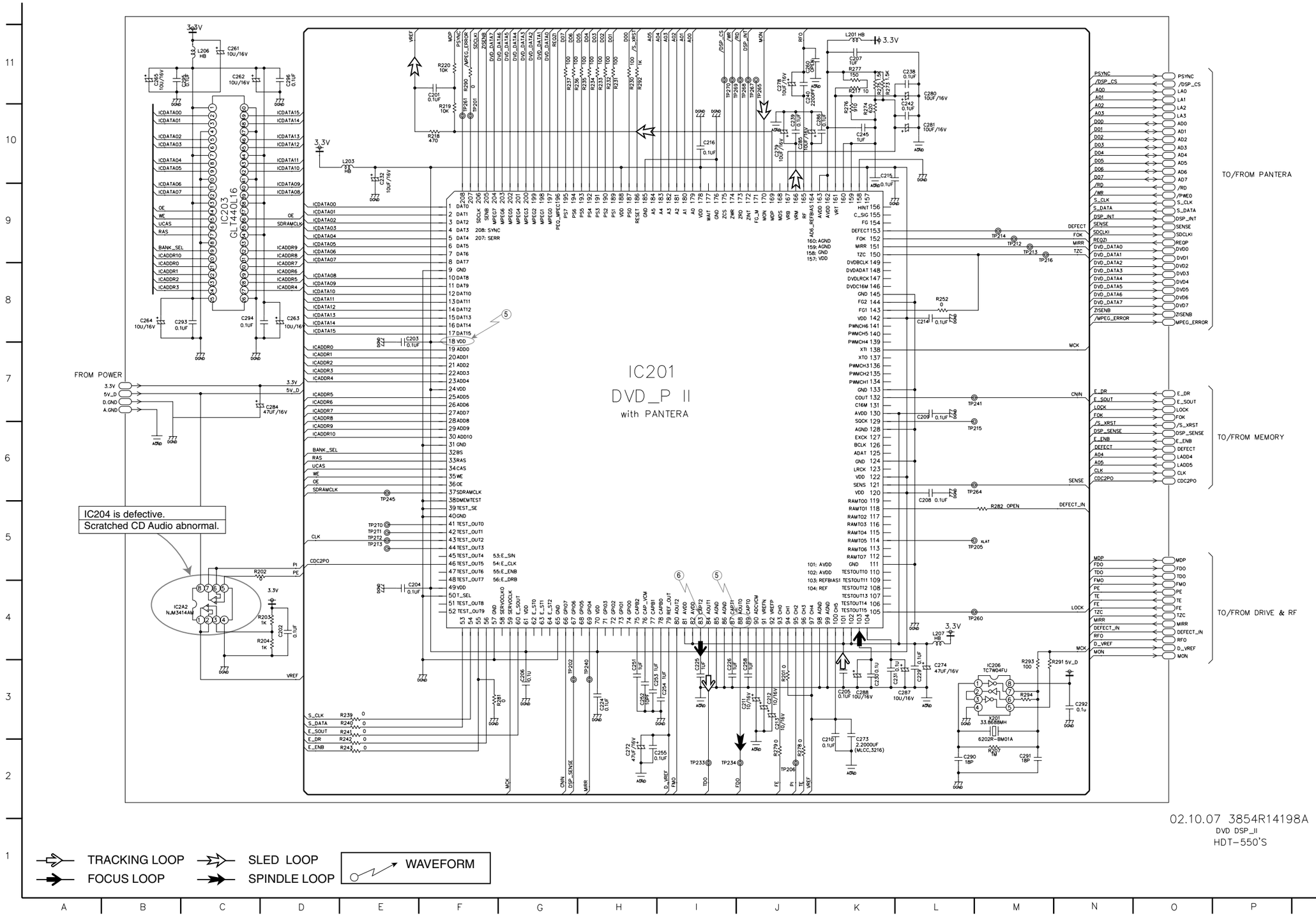


LOCATION GUIDE

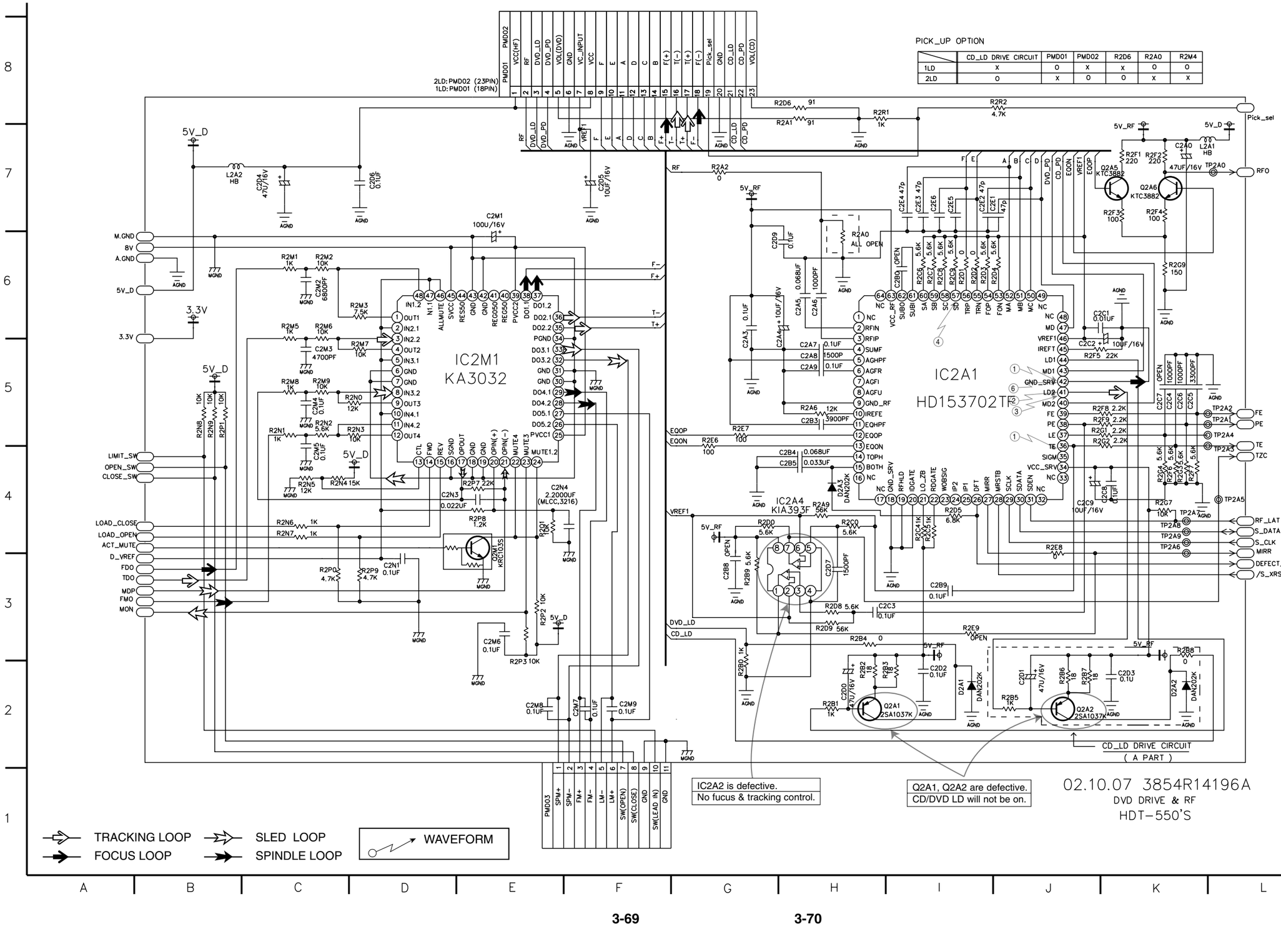
BC101	B16	C500	D3	C806	H12	L501	I5	R309	J8	R579	I2
BC91	L15	C501	F4	C807	J11	L503	I4	R310	G10	R582	H2
BC92	J15	C502	F2	C808	G12	L504	D4	R311	H9	R583	D4
C162	E13	C503	H2	C809	G12	L505	J2	R312	H9	R589	H4
C163	E12	C504	I4	C810	G12	L506	I4	R313	F10	R591	K1
C164	D12	C505	D4	C811	G12	L551	J4	R314	F11	R595	J3
C165	D12	C506	D4	C812	G11	L702	D11	R315	F11	R5A2	I4
C166	B13	C508	F2	C813	G12	L704	C15	R316	J7	R5A3	I4
C167	B11	C509	I4	C814	G11	L705	C16	R317	I9	R5A5	J4
C168	B12	C510	H5	C815	G11	L706	J12	R318	G7	R5B3	E4
C169	D13	C511	K1	C816	G11	L707	F15	R319	G10	R5B4	J3
C170	C11	C512	K1	C817	G11	L751	F16	R320	G9	R5B5	H4
C201	E7	C513	J1	C818	H10	L7V1	D1	R321	F8	R5C1	F2
C202	C9	C514	G1	C819	G11	L801	I11	R322	G8	R5C5	C6
C203	C9	C515	G1	C820	H11	L802	I10	R323	F7	R5C6	K3
C204	C9	C516	B2	C821	H11	L901	J15	R324	F9	R5C7	K3
C205	C9	C518	I4	C822	H11	L902	J15	R325	I7	R5C9	F2
C206	C8	C519	H2	C823	H11	L903	J15	R326	F9	R5P2	H4
C207	C8	C520	E5	C824	H11	L904	K15	R327	F9	R5P3	H4
C208	D8	C523	I3	C825	I11	L905	J16	R328	E9	R5R8	C5
C209	D8	C524	I3	C826	H11	L906	J16	R329	E8	R551	J5
C210	D9	C525	C8	C827	J11	L907	J16	R330	F8	R701	I16
C211	D10	C526	B10	C828	J14	L910	J15	R331	E8	R704	I14
C212	D10	C527	J1	C829	J14	LD501	G5	R332	E8	R705	H15
C213	D9	C531	G2	C834	J13	MS501	C4	R333	E8	R706	H15
C214	D9	C532	F1	C842	F13	P3D01	H9	R334	J9	R707	C15
C215	D10	C533	D7	C843	B2	P3D02	F9	R335	J9	R708	E14
C216	F7	C534	D5	C850	J12	P3D03	L8	R336	I9	R709	E14
C301	H10	C535	I2	C852	K13	PMG01	C1	R337	I9	R710	D14
C302	E9	C543	H1	C854	J13	PMG02	C1	R338	J5	R711	D14
C303	G9	C544	I1	C855	G13	PMG03	F12	R339	I5	R712	E15
C304	J9	C545	I1	C856	L13	PMG04	L2	R340	K4	R713	E15
C305	J8	C546	B8	C857	K13	PM701	I15	R341	F7	R715	C14
C306	H9	C547	H2	C859	L14	PM702	I12	R342	I5	R716	B7
C307	G9	C551	H1	C860	L13	PMC01	C7	R344	K11	R717	D16
C308	F11	C552	K2	C861	L14	PMD01	L5	R345	I6	R718	D16
C309	J9	C561	J3	C862	I12	PMD02	L10	R346	I8	R7M2	H15
C310	F10	C564	K1	C863	L14	PMD03	E13	R347	J7	R7M5	H16
C311	H10	C567	J3	C864	L12	PMJ01	A5	R348	G8	R7S1	F15
C312	I8	C570	G1	C869	J14	PMS01	B13	R349	F9	R7V1	F1
C313	G10	C571	G1	C870	G12	Q160	B15	R350	G6	R7V2	E2
C314	G9	C575	I2	C871	G12	Q162	B15	R351	G7	R7V3	E2
C315	J7	C576	I5	C884	K12	Q163	B15	R352	L9	R7V4	E2
C316	I8	C577	H4	C885	J12	Q164	B15	R501	C3	R7V5	E2
C317	G8	C578	F4	C886	L15	Q166	B12	R502	C3	R7V6	E2
C318	G8	C581	E4	C887	G13	Q167	B12	R503	G4	R7V7	D2
C319	G9	C582	J3	C888	G13	Q168	D13	R504	E4	R7V8	D2
C320	H7	C583	G2	C889	H15	Q169	B12	R505	C5	R7V9	D2
C321	I10	C589	F4	C890	H14	Q301	H10	R507	K5	R801	H12
C322	H7	C596	J1	C891	J12	Q302	F10	R508	C3	R802	G11
C323	E9	C5A3	I4	C901	K15	Q303	G10	R509	G4	R803	F11
C324	E9	C5A4	J4	C911	K15	Q304	G10	R510	C3	R804	G11
C325	H7	C5A5	J4	C912	J15	Q305	I7	R511	J3	R805	G11
C326	E8	C5K1	I3	C915	J15	Q306	F10	R512	C6	R806	H11
C327	H7	C5P1	H5	C916	J16	Q308	K11	R513	K1	R807	I11
C328	I9	C5P2	H4	C921	J15	Q309	J5	R514	I5	R808	I11
C329	G7	C5R2	B2	C923	J15	Q310	G7	R515	G2	R809	I11
C330	G7	C551	J4	C924	K15	Q501	D4	R516	I4	R810	I11
C331	F8	C553	H4	C925	J15	Q502	F4	R517	I4	R811	I11
C332	G8	C703	I16	C5501	K2	Q503	D4	R518	I4	R812	I11
C333	G7	C704	F15	D160	C12	Q504	H5	R519	G2	R821	L13
C334	H8	C706	H15	D161	C12	Q514	E4	R520	F6	R822	L13
C335	G8	C707	I15	D162	C12	Q515	I3	R521	H2	R823	L12
C336	F8	C708	G14	D163	D13	Q551	J4	R522	C7	R824	L12
C337	F8	C709	I13	D301	J9	Q751	G14	R523	H2	R825	J14
C338	G9	C710	E14	D501	D4	Q804	J13	R524	H4	R826	J15
C339	F8	C712	E15	D502	I2	Q904	K14	R525	F2	R835	L13
C340	F8	C713	E15	D503	L5	Q905	J14	R526	F2	R842	D11
C341	G8	C714	E16	D509	H1	Q906	K15	R528	I2	R843	E8
C342	F7	C715	E16	D901	K15	R160	B15	R529	D4	R850	K13
C343	F7	C716	E16	D902	K15	R161	D12	R530	H5	R851	K13
C344	J9	C717	C15	D905	L15	R167	B15	R531	F1	R861	J14
C345	G8	C718	C15	D906	K15	R168	B15	R535	H1	R862	J14
C346	I10	C719	D15	ES501	A7	R169	B15	R542	D4	R869	L12
C347	G8	C720	E14	ES502	L5	R170	B16	R543	H4	R870	K12
C348	I8	C721	E14	FL301	G10	R171	D14	R544	L1	R874	L15
C349	G8	C722	D14	IC160	D13	R172	D11	R546	H1	R875	I15
C350	E8	C723	D14	IC161	C12	R173	C11	R547	H1	R876	I14
C353	I7	C726	D15	IC162	D12	R174	B13	R548	K2	R877	J14
C355	I6	C727	D15	IC164	E14	R175	B12	R550	F5	R878	J14
C356	I7	C729	E15	IC501	H3	R176	B12	R553	E3	R890	J13
C357	J8	C731	J12	IC503	B3	R177	B12	R555	I3	R901	G14
C358	I10	C732	E15	IC504	F1	R178	D13	R556	E4	R902	G14
C359	I10	C751	F16	IC505	E4	R179	C13	R557	A7	R903	K15
C360	I9	C752	I16	IC7V1	E1	R180	C13	R558	I3	R913	L15
C361	I5	C7M3	H16	J101	B15	R181	B12	R559	J3	R914	L16
C362	I7	C7M4	H15	J301	K4	R182	B11	R560	E4	R915	K15
C363	I7	C7M6	I14	J801	J14	R183	D5	R561	H5	R921	J14
C366	K7	C7S1	G15	J802	J14	R201	C9	R562	H5	R922	K14
C367	F9	C7S2	G15	J803	J13	R202	D9	R563	I1	RS501	E3
C368	F9	C7V1	E1	J804	J12	R203	D10	R564	K2	RS502	I3
C369	H9	C7V2	E1	J805	J12	R204	F7	R566	H2	SC901	K16
C370	H7	C7V3	F1	J806	K6	R301	G9	R567	J1	X301	G8
C371	H7	C7V4	E2	L201	D8	R302	K4	R568	J1	X501	G2
C372	G7	C7V5	E2	L301	J10	R303	I2	R569	H2	X502	G2
C374	H7	C801	I12	L302	H10	R304	I2	R570	E4	X751	E16
C375	L7	C802	I13	L303	F8	R305	F10	R575	C3	ZD161	B13
C376	E8	C803	I13	L304	F8	R306	F10	R576	C3	ZD503	D4
C377	J7	C804	H12	L305	G7	R307	G10	R577	C3	ZD801	I11
C378	K11	C805	H12	L307	J10	R308	I8	R578	B3	ZD802	I11

CIRCUIT DIAGRAMS

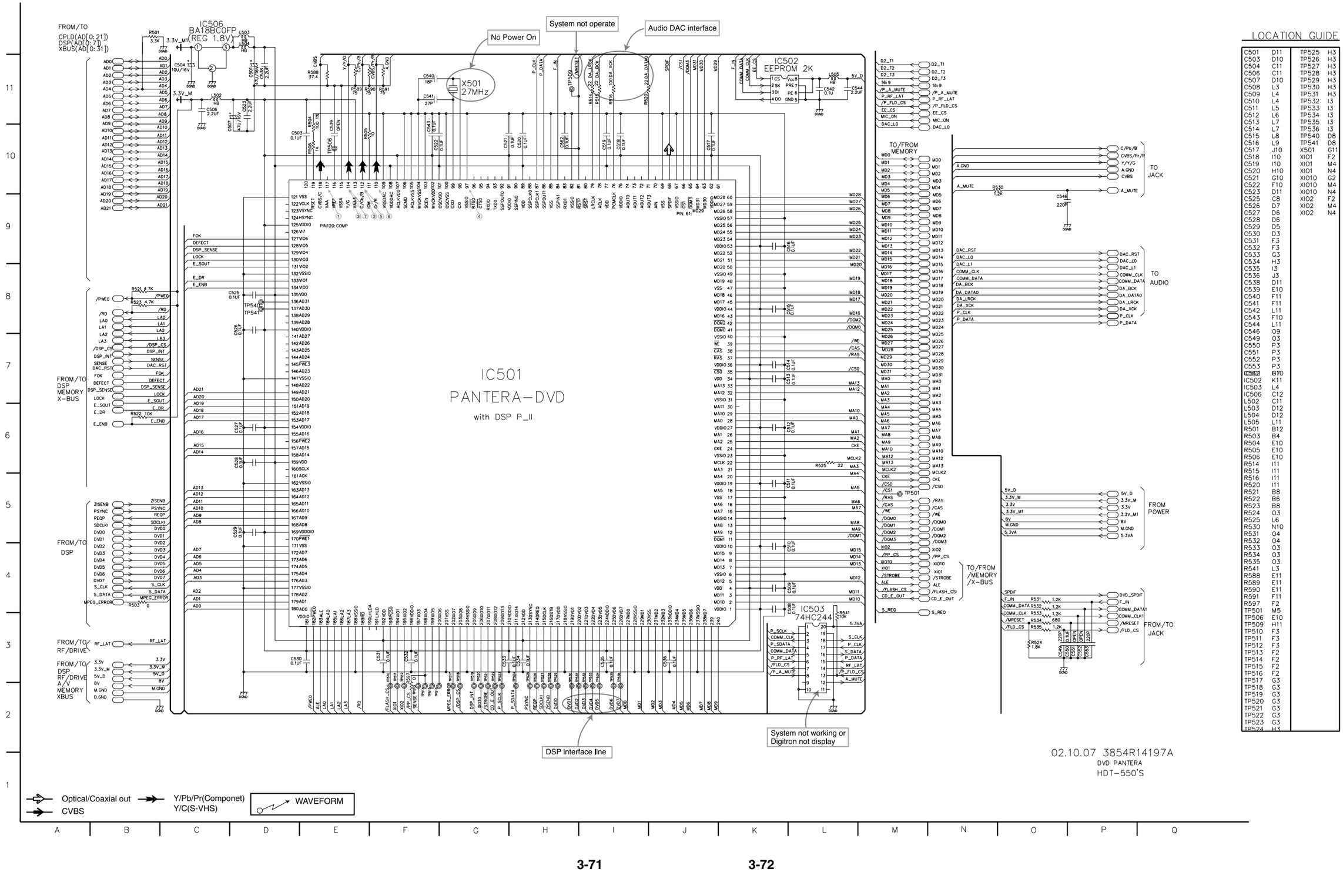
1. DVD DSP CIRCUIT DIAGRAM



2. DRIVE & RF CIRCUIT DIAGRAM



3. MPEG CIRCUIT DIAGRAM

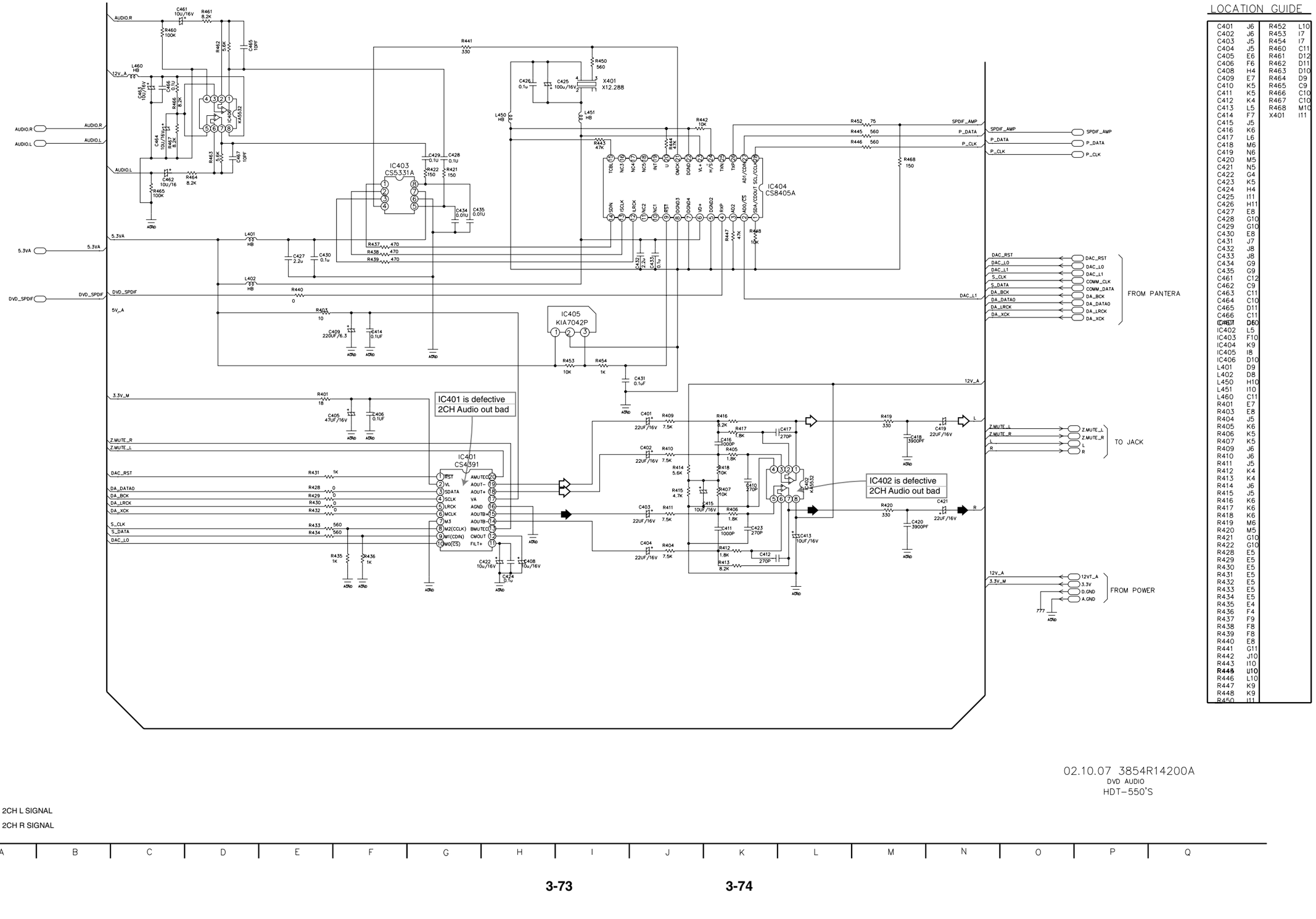


LOCATION GUIDE

C501	D11	TP525	H3
C503	D10	TP526	H3
C504	C11	TP527	H3
C506	C11	TP528	H3
C507	D10	TP529	H3
C508	L3	TP530	H3
C509	L4	TP531	H3
C510	L4	TP532	I3
C511	L5	TP533	I3
C512	L6	TP534	I3
C513	L7	TP535	I3
C514	L7	TP536	I3
C515	L8	TP540	D8
C516	L9	TP541	D8
C517	J10	X501	G11
C518	I10	XI01	F2
C519	I10	XI01	M4
C520	H10	XI01	N4
C521	G10	XI010	G2
C522	F10	XI010	M4
C523	D11	XI010	N4
C525	C8	XI02	F2
C526	D7	XI02	M4
C527	D6	XI02	N4
C528	D6		
C529	D5		
C530	D3		
C531	F3		
C532	F3		
C533	G3		
C534	H3		
C535	I3		
C536	J3		
C538	D11		
C539	E10		
C540	F11		
C541	F11		
C542	L11		
C543	L11		
C544	F10		
C546	L11		
C549	O9		
C550	O3		
C551	P3		
C552	P3		
C553	P3		
C561	B10		
IC502	K11		
IC503	L4		
IC506	C12		
L502	C11		
L503	D12		
L504	D12		
L505	L11		
R501	B12		
R503	B4		
R504	E10		
R505	E10		
R506	E10		
R514	I11		
R515	I11		
R516	I11		
R520	I11		
R521	B8		
R522	B6		
R523	B8		
R524	O3		
R525	L6		
R530	N10		
R531	O4		
R532	O4		
R533	O3		
R534	O3		
R535	O3		
R541	L3		
R588	E11		
R589	E11		
R590	E11		
R591	F11		
R597	F2		
TP501	M5		
TP506	E10		
TP509	H11		
TP510	F3		
TP511	F3		
TP512	F3		
TP513	F2		
TP514	F2		
TP515	F2		
TP516	F2		
TP517	G3		
TP518	G3		
TP519	G3		
TP520	G3		
TP521	G3		
TP522	G3		
TP523	G3		
TP524	H3		

02.10.07 3854R14197A
DVD PANTERA
HDT-550'S

4. AUDIO DM CIRCUIT DIAGRAM

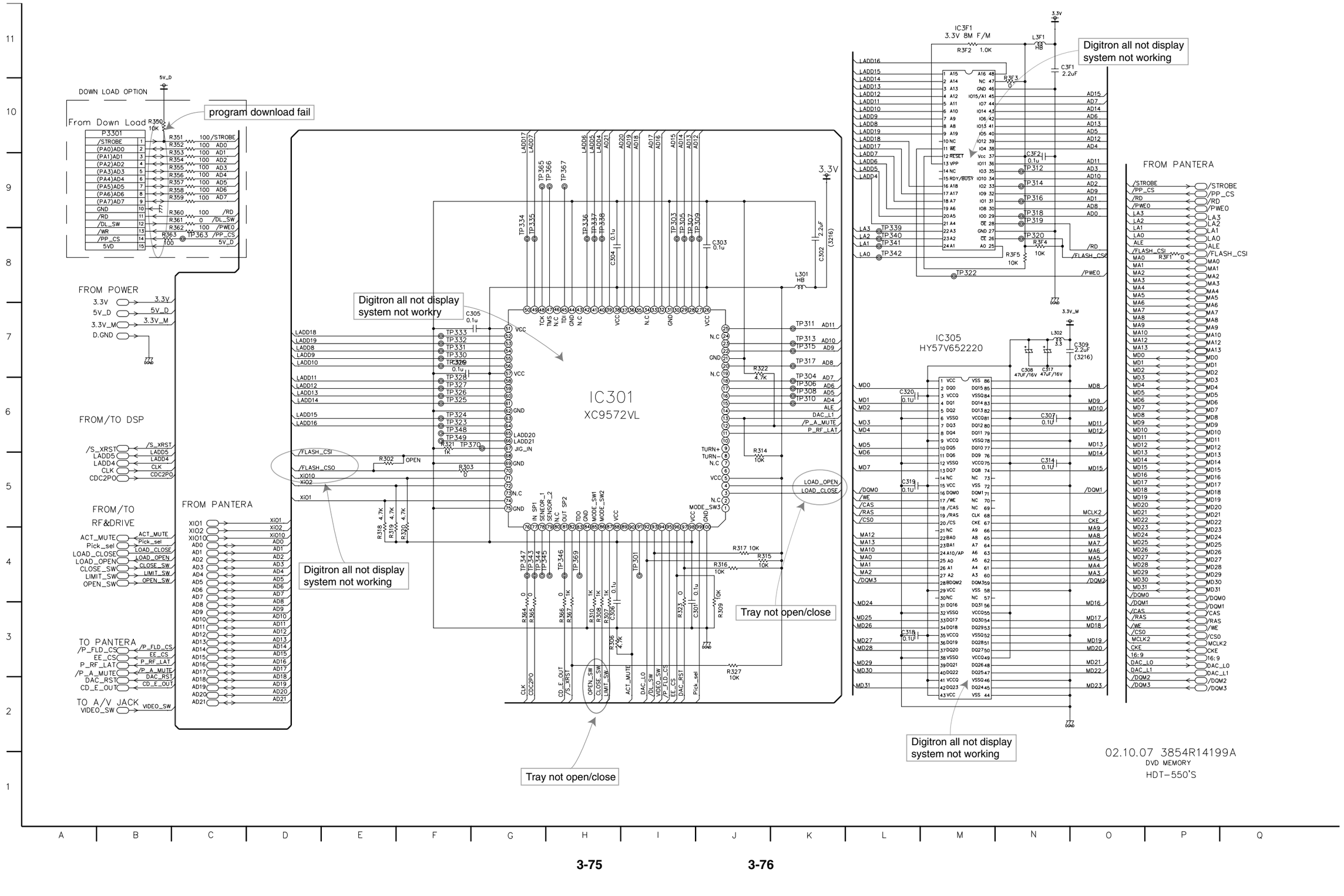


LOCATION GUIDE

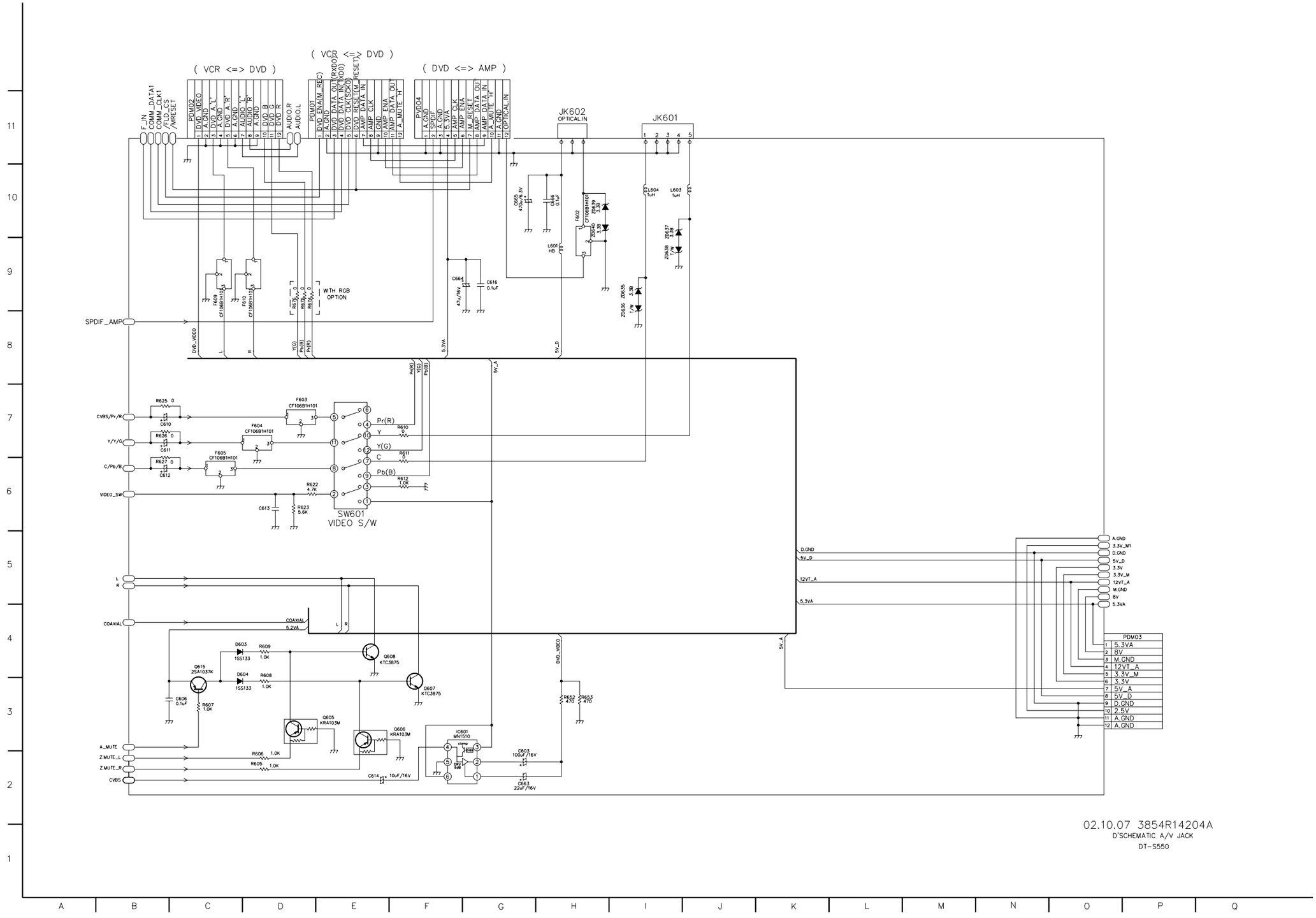
C401	J6	R452	L10
C402	J6	R453	I7
C403	J5	R454	I7
C404	J5	R460	C11
C405	E6	R461	D12
C406	F6	R462	D11
C408	H4	R463	D10
C409	E7	R464	D9
C410	K5	R465	C9
C411	K5	R466	C10
C412	K4	R467	C10
C413	L5	R468	M10
C414	F7	X401	I11
C415	J5		
C416	K6		
C417	L6		
C418	M6		
C419	N6		
C420	M5		
C421	N5		
C422	G4		
C423	K5		
C424	H4		
C425	I11		
C426	H11		
C427	E8		
C428	G10		
C429	G10		
C430	E8		
C431	J7		
C432	J8		
C433	J8		
C434	G9		
C435	G9		
C461	C12		
C462	C9		
C463	C11		
C464	C10		
C465	D11		
C466	C11		
C467	D10		
IC401	L5		
IC402	L5		
IC403	F10		
IC404	K9		
IC405	I8		
IC406	D10		
L401	D9		
L402	D8		
L450	H10		
L451	I10		
L460	C11		
R401	E7		
R403	E8		
R404	J5		
R405	K6		
R406	K5		
R407	K5		
R409	J6		
R410	J6		
R411	J5		
R412	K4		
R413	K4		
R414	J6		
R415	J5		
R416	K6		
R417	K6		
R418	K6		
R419	M6		
R420	M5		
R421	G10		
R422	G10		
R428	E5		
R429	E5		
R430	E5		
R431	E5		
R432	E5		
R433	E5		
R434	E5		
R435	E4		
R436	F4		
R437	F9		
R438	F8		
R439	F8		
R440	E8		
R441	G11		
R442	J10		
R443	I10		
R445	U10		
R446	L10		
R447	K9		
R448	K9		
R450	I11		

02.10.07 3854R14200A
DVD AUDIO
HDT-550'S

5. MEMORY CIRCUIT DIAGRAM



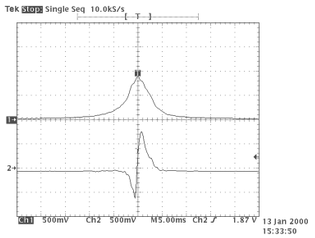
6. SCART(JACK) CIRCUIT DIAGRAM



• WAVEFORMS

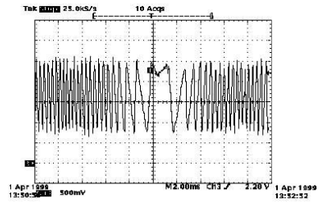
(RF/SERVO)

①



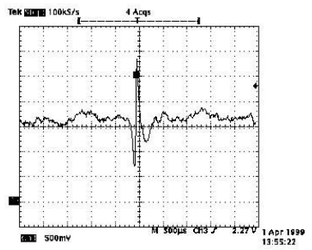
IC2A1 Pin 42, Focus Error
IC2A1 Pin 36, Pi

②



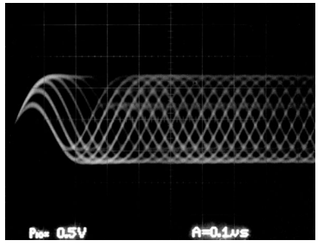
IC2A1 Pin 41
Tracking Error

③



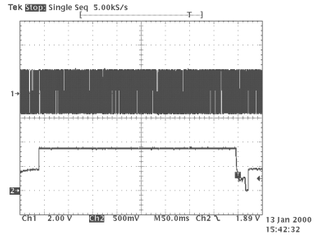
IC2A1 Pin 41
VBR TRACKING Error

④



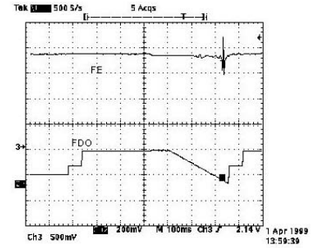
IC2A1 Pin57,
RF

⑤



IC201 Pin 88, SLED Drive(FMO)
IC201 Pin 18, SLED FG

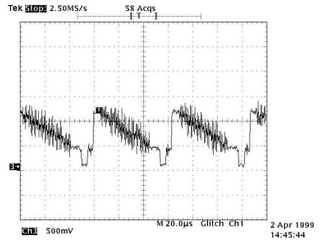
⑥



IC2A1 Pin42, Focus Error(in Focus Search)
IC201 Pin 83, Focus Drive(FDO)

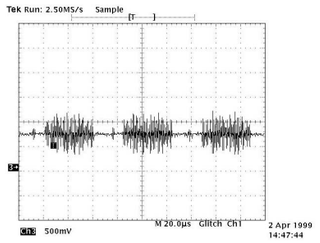
(VIDEO ENCODER)

①



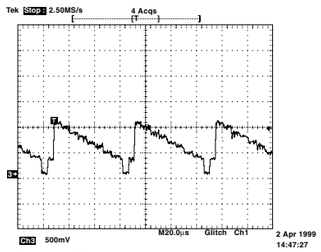
IC501 Pin 118, Composite

②



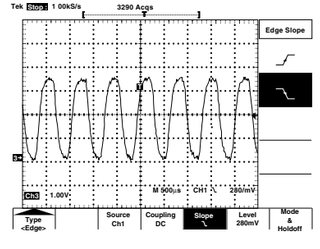
IC501 Pin 112, Chrominance
(Super video out Mode)

③



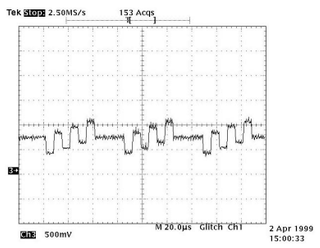
IC501 Pin 114, Luminance
(Super video out Mode)

④



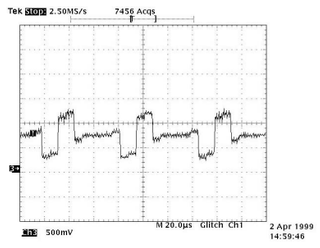
IC501 Pin 98,
MPEG Clock(27MHz)

⑤



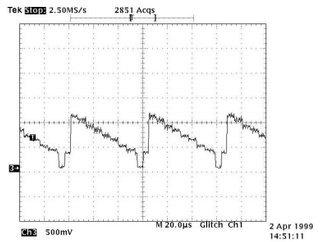
IC501 Pin 112
Component Pb

⑥



IC501 Pin 110
Component Pr

⑦



IC501 Pin 114
Component Y

• CIRCUIT VOLTAGE CHART

	IC203		IC201		IC301		IC3F1		IC501		IC305		IC2A1		IC2M1	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	3.18	3.16	3.12	0	3.17	3.16	0	0	3.12	3.1	3.06	3.05	0	0	2.11	2.14
2	3.12	2.69	3.12	0	0	0	0	0	0	0.41	0.29	0.35	3.16	3.13	2.1	2.12
3	3.12	2.69	3.12	0	3.16	0	0	0	0	0.47	3.06	3.05	3.16	3.13	2.11	2.11
4	0	0	3.12	0	3.16	0	0	0	1.75	1.73	3.06	0.33	0.75	1.55	2.1	2.15
5	3.12	2.74	3.12	3.12	3.17	3.16	0	0	0	0.49	0	0	2.04	3.02	2.1	2.12
6	3.12	2.71	3.12	3.12	3.17	3.16	0	0	0	0	0	0	0	0	0	0
7	3.18	3.17	3.12	0	0	0	0	0	0	0.37	0	0.34	0	0	0	0
8	3.12	2.68	3.12	3.12	3.17	3.16	0	0	0	0.35	0.4	0	0	0.33	2.11	2.12
9	3.12	2.63	0	0	0	0	3.13	2.92	0	0.33	0	3.05	0	0	2.02	1.99
10	0	0	3.12	3.12	0	0	0	0	3.22	3.19	0.33	0	0.44	0	2.1	2.12
11	3.12	2.7	3.12	3.12	0	0	3.13	3.12	0	0	0.41	0	1.72	1.19	2.11	2.12
12	3.12	2.7	3.12	0	0	0	3.2	3.2	0	0	0	0	2.06	2.3	2.09	2.13
13	3.18	3.17	3.12	3.12	3.17	3.16	3.2	3.2	0	0	0	0.46	2.25	3.08	3.25	2.23
14	0	0	3.12	0	0	0	0	0	0	0	0	0	1.32	3.13	2.51	0
15	3.12	3.04	3.12	0	0	0	0	0	0	0.79	3.06	3.05	1.46	2.27	2.51	0
16	3.12	0	3.12	0	2.17	2.18	3.19	0	0	0.74	0	0	0	2.4	0	0
17	3.12	3.02	3.12	0	0.38	2.21	0	0	0	0	3.09	3.07	0	0	2.18	0
18	0	0	3.13	3.12	0.41	0.61	0	0	0	0.71	0	2.82	0	0	0	0
19	0	0	3.13	0	0	0	0	0	3.22	3.1	2.84	3.03	0	0	0	0
20	0	3.12	0	0	0	0	0	0	3.22	3.13	3.05	2.76	0	0	1.52	1.89
21	3.13	0	3.13	0	0	0	0	0	3.22	3.13	0	0	3.01	5.01	1.88	1.89
22	3.13	3.17	0	0	0	0	0	0	1.64	0	0	1.38	3.85	5.01	0	0
23	3.13	0	0	0	0	0	0	0	0	0	0.8	0.79	0	0	3.13	0
24	0	0	3.13	0	0	0	0	0	3.22	3.13	0	0	0	0	0	0
25	3.18	0	3.12	0	0	0	3.11	3.11	0	3.13	1.14	1.1	0	0	7.95	7.92
26	0	0	0	0	3.21	3.16	3.17	3.2	0	3.13	0.38	1.54	3.31	3.63	3.92	3.71
27	0	0	0	3.12	0	0	0	0	3.22	3.11	0	0	0	0	3.92	3.71
28	3.12	0	0	0	0	0	3.11	0	0	1.1	0	0	3.14	3.16	3.9	3.74
29	0	3.12	0	0	0	0	0.61	1.07	0	0	0	0.05	5.15	5.14	3.95	3.68
30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31	0	3.17	0	3.12	0	0	0.6	0	0	0	0	0	0	0	0	0
32	0	0	0	0	0	0	0	0	3.22	1.39	0	0	0	0	1.18	4.2
33	3.1	0	3.12	0	0	0	0.59	0	3.22	0.8	0	0	0	0	1.18	3.43
34	3.18	0	3.12	0	0	0	0	0	1.75	1.52	0.34	0	5.03	4.99	0	0
35	1.5	0	3.12	0	0	0	0.61	0	3.22	2.76	3.03	3.05	2.29	2.34	3.92	3.75
36	0	3.12	0	0	0	0	0	0	3.22	3.11	0	0.34	2.2	2.3	3.93	3.73
37	0	0	1.51	0	0	0	3.18	0	3.22	3.03	0	0	2.2	2.2	3.92	3.73
38	3.18	0	0	0	3.17	3.16	0	0	3.22	2.83	0	0	2.29	2.26	3.92	3.68
39	3.12	3.12	0	0	0	0	0	0	3.22	3.08	0.56	0	2.24	2.24	7.95	7.94
40	3.12	3.12	0	0	0	0	2.17	0	0	0	0.56	0	0	0	7.91	7.87
41	0	3.17	0	0	0	0	0	0	0	0	0	3.05	5.03	5.01	0	0
42	3.12	0	0	0	0	0	0.38	2.28	0	0	3.03	0.45	0	0	0	0
43	3.12	0	0	0	0	0	0	0	0	0.34	3.03	3.05	0	0	0	0
44	3.18	0	0	0	0	0	0.41	0.65	3.22	3.11	0	0	5.03	1.59	0	0
45	3.12	3.12	0	0	3.17	3.15	0	0	0.45	0.33	0	0.44	2.3	2.3	7.95	7.94
46	2.76	3.12	1.56	0	0	0	0	0	0	0	0	0	2.3	2.3	2.11	2.12
47	0	0	0.91	0	3.17	3.15	0	0	0	0	0.38	0	1.74	2.3	2.1	2.12
48	3.12		1.65	0	2.19	0	0	0	0	0	0	0	0	0	2.11	2.12
49	3.12		3.14	0.53	0	0			0	0	3.03	0	0	0		
50	0		0	0	0	0			0.43	0.39	0.36	3.05	2.3	2.3		
51			0.64	0	3.17	0			0.42	0.45	0	0.34	2.3	2.3		
52			0.43	0	3.17	3.19			0.43	0.35	0	0	2.3	2.3		
53			0	0	3.11	2.91			3.12	3.11	0	0	2.3	2.3		
54			2.58	0	0	0			0	0	0.41	0	2.3	2.3		
55			0	0	0	0			0	0.33	3.03	3.05	2.3	2.3		
56			3.11	0	0	0			0.39	0.36	0	0.34	2.3	2.3		
57			0	0	3.17	3.19			0	0	0	0	2.3	2.3		
58			1.65	0	0	0			0	0	0	0	2.3	2.3		
59			1.79	0	0	0			0	0.42	0	0	2.29	2.3		
60			0	0	0	0			0.44	0.4	0	0.79	2.29	2.3		
61			3.13	0	0	0			0.44	0.47	0	0.79	0.36	0.56		
62			0	0	0	0			3.12	3.11	0	2.26	0.37	0.62		
63			3.13	0	0	0			0.45	0.35	0	0.74	5.03	5.02		
64			0	0	0	0			0	0	0	0.78	0	0		
65			0	0	0	0			0	0	0	0				
66			3.12	0	0	0			0	0	0	0				
67			0	0	0	0			0	0.31	3.11	3.1				
68			3.13	3.12	3.11	3.1			1.51	0	1.6	1.59				
69			4.08	0	0	0			0	1.5	0	0				
70			3.13	0	0	3.16			1.47	0	0	0				
71			0	0	3.11	3.1			0	0	0	0				
72			3.13	3.13	0	0			0	0	0	0				
73			0	0	0	0			0	0	0	0				
74			0	0	3.11	3.1			0	0	0	0.45				
75			0.78	0	0	0			3.12	3.11	3.04	3.05				
76			1.41	0	0	0			1.48	1.26	0	0				
77			0.77	0	0	0			1.74	1.74	0	0				
78			0.77	0	0	0			1.54	1.54	0	0				
79			2.1	2.11	3.17	0			1.56	1.55	0	0				
80			2.12	2.11	0	0			3.11	3.1	0	0.34				
81			3.18	0	3.17	0			3.01	3.01	1.69	0				

	IC203		IC201		IC301		IC3F1		IC501		IC305		IC2A1		IC2M1	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
82			3.18	0	3.17	3.19			0	0	0	0				
83			1.93	1.93	2.12	2.27			0	0.33	0	0				
84			2.11	2.11	0	0			1.74	5.12	0	0				
85			0	0	4.41	4.41			0	0	0	0.33				
86			0	0	0	0			0	0	0	0				
87			1.93	0	0	0			1.42	3.11						
88			2.1	0	3.17	3.19			1.87	3.11						
89			1.93	1.92	2.66	0			1.67	1.74						
90			1.59	0	0	3.17			0	0						
91			0.8	0	3.19	0			3.11	3.11						
92			2.36	2.36	3.19	3.19			0	3.11						
93			2.24	1.6	3.19	3.19			3.11	3.11						
94			1.58	1.56	0	0			0	0.34						
95			1.64	1.62	3.13	3.13			0	0.34						
96			1.58	1.62	0	0			2.82	3.11						
97			1.58	1.56	3.19	3.19			0	0						
98			0	0	3.19	3.19			0.85	0.92						
99			0	0	0.36	0.36			0.89	0.93						
100			1.58	0	0	0			0	0						
101			3.18	0					1.79	1.74						
102			3.18	0					3.23	3.1						
103			2.01	2.01					0	0						
104			2.01	2.01					0	0						
105			0	0					0	0						
106			3.12	0					0	0						
107			2.07	3.12					3.23	3.09						
108			0.41	0					1.74	1.74						
109			0	0					0	0						
110			2.15	0					1.75	1.3						
111			0	0					0.34	0.74						
112			0	0					0	1.39						
113			0	0					3.2	3.1						
114			0	0					0.49	0.64						
115			0	0					0	0						
116			0	0					1.17	1.29						
117			0	0					1.79	1.74						
118			0	0					0	0.74						
119			0	0					1.17	1.28						
120			3.12	0					2.04	1.82						
121			0	0					0	0						
122			3.12	3.12					0	0						
123			3.12	3.12					0	0.36						
124			0	0					0	0.36						
125			3.12	3.12					3.16	3.1						
126			3.12	0					0	0.36						
127			2.42	0					0	0						
128			0	0					0	0						
129			2.41	0					0	0						
130			3.18	3.17					0	0						
131			3.12	3.12					0	0						
132			3.12	0					0	0						
133			0	0					3.13	0						
134			3.12	3.12					0	0						
135			3.12	3.12					1.74	1.74						
136			2.45	2.33					0	0						
137			1.68	1.65					0	0						
138			1.77	1.87					0	0						
139			2.45	2.33					0	0						
140			2.61	0.32					3.13	3.1						
141			2.54	0					0	0						
142			3.12	0					0	0						
143			0	0					0	0						
144			0	0					0	0						
145			0	0					3.13	3.09						
146			2.54	0					0	0						
147			2.54	0					0	0						
148			2.54	0					0	0						
149			2.54	0					0	0						
150			4.76	0					0	0						
151			4.13	0					0	0						
152			0	0					0	0						
153			0	0					0	0						
154			0	0					3.13	3.1						
155			3.12	0					0	0						
156			3.12	0					3.13	3.09						
157			3.12	0					0	0						
158			0	0					0	1.73						
159			0	0					1.74	1.73						
160			0	0					1.12	1.83						
161			2.64	2.62					3.13	0						
162			3.18	3.16					0	0						

	IC203		IC201		IC301		IC3F1		IC501		IC305		IC2A1		IC2M1	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
163			3.18	3.15					0	0						
164			2.02	0					0	0						
165			2.08	0					0	0						
166			2.09	0					0	0						
167			1.57	0					0	0						
168			2.51	0					0	0						
169			1.6	1.57					3.13	3.1						
170			3.13	3.01					3.13	0						
171			2.53	0					0	0						
172			0	0					0.44	0.6						
173			3.11	0					0.4	2.15						
174			3.11	0					2.2	2.15						
175			3.11	3.1					0	0						
176			0	0					0.66	0.8						
177			3.12	0					0	0						
178			3.12	2.59					0.65	0.83						
179			3.11	3.03					0.65	0.79						
180			0	0					0.67	0.79						
181			0	0					0	3.1						
182			0	0					3.13	3.1						
183			0	0					0	0						
184			0	0					3.13	3.1						
185			0	0					0	0						
186			3.17	0					0	0						
187			0.69	0					0	0						
188			3.18	3.12					0	0						
189			0.66	0.77					0	3.1						
190			0.65	0					0	0						
191			0.67	0.87					0	0						
192			0	0					0	1.75						
193			2.21	2.17					3.13	3.09						
194			0.41	0					3.13	3.16						
195			0.45	0					0	0						
196			0	0					3.13	3.1						
197			0	0					0	0						
198			0	0					3.13	0						
199			0	3.12					3.13	3.1						
200			0	0					0	3.1						
201			0	0					0	0						
202			0	1.22					3.18	0						
203			0	1.22					3.18	3.1						
204			0	0					0	0						
205			3.11	3.11					0	0						
206			1.53	3.11					0	3.1						
207			3.12	0					0	0						
208			3.12	3.12					0.37	0						
209									0	0						
210									3.13	3.1						
211									0	0						
212									0	0						
213									0	0						
214									0	0						
215									0	0						
216									0	0						
217									0	0						
218									0	0						
219									0	0						
220									0	3.12						
221									0	0						
222									0	0						
223									0	0						
224									0	0						
225									3.13	0						
226									0	0						
227									0	0.41						
228									0	0						
229									0	0						
230									0	0						
231									0	0						
232									0	0.43						
233									3.24	0						
234									0	0.45						
235									0	0.34						
236									0	0						
237									0	0						
238									0	0						
239									0	0						
240									0	0.36						
241																
242																
243																

	IC901		IC451		IC401		IC454		IC453		IC452		IC402		IC801	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	0	0	0	0	2.98	2.98	5.51	5.51	5.41	5.42	5.49	0	5.47	5.47	1.83	1.81
2	5.1	5.05	3.15	3.15	3.26	3.26	5.51	5.51	5.41	5.42	5.49	5.51	5.47	5.47	0	0
3	0	0	3.15	3.15	0	0	5.51	5.51	5.41	5.41	5.49	5.51	5.47	5.47	1.83	1.81
4	5.14	5.14	3.15	3.14	1.57	0	0	0	0	0	0	0	0	0	0	0
5	0.48	0	3.15	3.15	1.58	1.58	5.51	5.51	5.41	5.41	5.49	5.51	5.47	5.47	0	0
6	0.48	0	3.15	3.15	1.3	0	5.51	5.51	5.41	5.42	5.49	5.51	5.47	5.47	4.59	4.57
7	5.17	5.17	3.15	3.15	0	0	5.51	5.51	5.41	5.41	5.49	0	5.47	5.47	1.84	1.82
8	2.22	2.21	2.43	2.42	3.24	3.24	11.95	11.95	11.95	11.95	11.95	11.95	11.95	11.95	0	0
9	2.35	2.35	2.48	2.46	0	0									1.84	1.82
10	0	0	2.43	2.42	3.2	3.19										
11	2.26	2.24	2.48	0	4.85	4.84										
12	2.46	2.45	0	0	2.31	0										
13	0	0	0	0	2.35	0										
14	5.17	5.16	0	0	2.35	0										
15	5.17	5.16	2.43	2.43	0	0										
16	5.1	5.06	2.47	3.14	0	0										
17	0	0	2.45	0	4.91	0										
18	0	0	0	0	2.34	2.34										
19	5.16	5.16	4.91	4.88	2.34	2.33										
20	5.14	5.14	0	0	0	0										
21	5.01	5.02	0	0												
22	0	0	0	0												
23	0	0	4.91	0												
24	0	0	0	0												
25	2.68	2.68	4.9	4.88												
26	5.17	5.17	0	0												
27	5.17	5.17	0	0												
28	4.77	4.87	0	0												
29	5.07	5.06	0	0												
30	21.58	18	4.91	4.88												
31	23.58	18	0	0												
32	23.6	23	4.91	4.88												
33	27.54	21.21	0	0												
34	23.6	17.18	0.36	0												
35	23.6	22.91	0	0												
36	21.6	19.14	3.24	3.23												
37	21.61	25.01	3.19	3.19												
38	23.65	23.06	2.93	3.92												
39	23.65	23.09	0	0												
40	23.57	23.08	0	0												
41	25.6	23.07	1.3	1.31												
42	25.6	25.03	1.48	1.47												
43	25.6	25.03	1.57	0												
44	25.6	23.07	1.58	1.58												
45	27.6	25.07	0	0												
46	27.6	21.16	3.15	3.15												
47	27.5	25.11	0	0												
48	27.5	24.76	0	0												
49	27.5	27.86	0	0												
50	27.5	26.88	0	0												
51	6.73	6.69	3.15	3.14												
52	25.7	25.13	0	0												
53	25.6	25.08														
54	25.6	25.16														
55	25.6	25.15														
56	25.6	25.08														
57	25.6	25.13														
58	27.7	27.08														
59	5.16	5.15														
60	5.16	5.16														
61	5.16	5.16														
62	5.16	5.16														
63	0	0														
64	0	0														

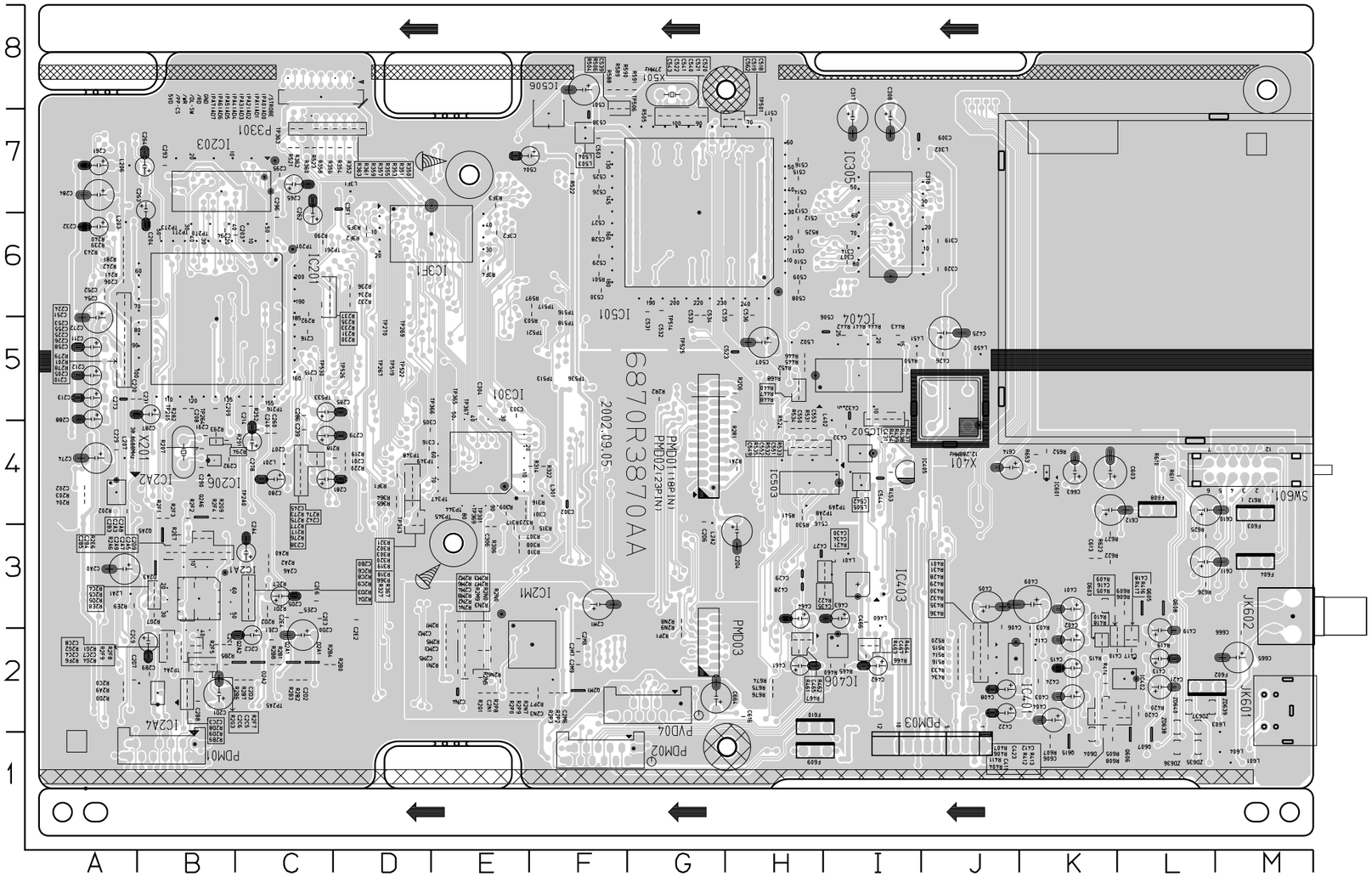
	IC503		IC502		IC2A4		IC2A2		IC206		IC504		IC506	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
1	0	0	0	0	4.87	4.39	1.57	1.56	2.63	2.64	2.11	2.19	(IN)0	0
2	3.1	3.1	5.03	5.03	2.3	2.31	1.57	1.56	2.74	0	5.05	5.05	(OUT)1.80	0
3	5.03	5.03	0	0	2.29	2.29	1.57	0	2.74	2.76	2.37	2.44		
4	0	0	5.1	5.1	0	0	0	0	0	0	0	0		
5	0	0	0	0	2.29	2.29	1.62	1.62	1.92	1.88				
6	0	0	5.04	5.04	2.3	2.31	1.62	1.62	2.28	0				
7	5.05	5.05	0	0	2.51	2.45	1.62	1.62	2.28	0				
8	0	3.15	5.03	5.04	5.02	5.02	5.04	4.99	5.04	0				
9	0	0												
10	0	0												
11	0	0.46												
12	0	0.15												
13	3.11	3.1												
14	0	0												
15	0	0												
16	0	0												
17	3.09	3.09												
18	5.15	5.14												
19	0	0												
20	5.15	5.15												

	Q2M1		Q2A1		Q2A6		Q2A5		Q2A2	
	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
E	0	0	5.02	0	0	2.41	2.34	2.35	5.02	4.95
B	0	0	0	0	3.62	3.72	3.82	0	0	0
C	0	3.14	0	0	0	3.1	0	0	5.01	4.94

	Q610		Q611		Q609		Q613		Q614		Q612	
PIN	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY	STOP	PLAY
Emitter	0	0	0	0	0	0	0	0	0	0	0	0
Collector	0	0	0	0	0	0	0	0	0	0	0	
Base	0.77	0.78	0.77	0.77	0.76	0.77	0.76	0.77	0.77	0.77	0.76	0.79

PRINTED CIRCUIT DIAGRAMS

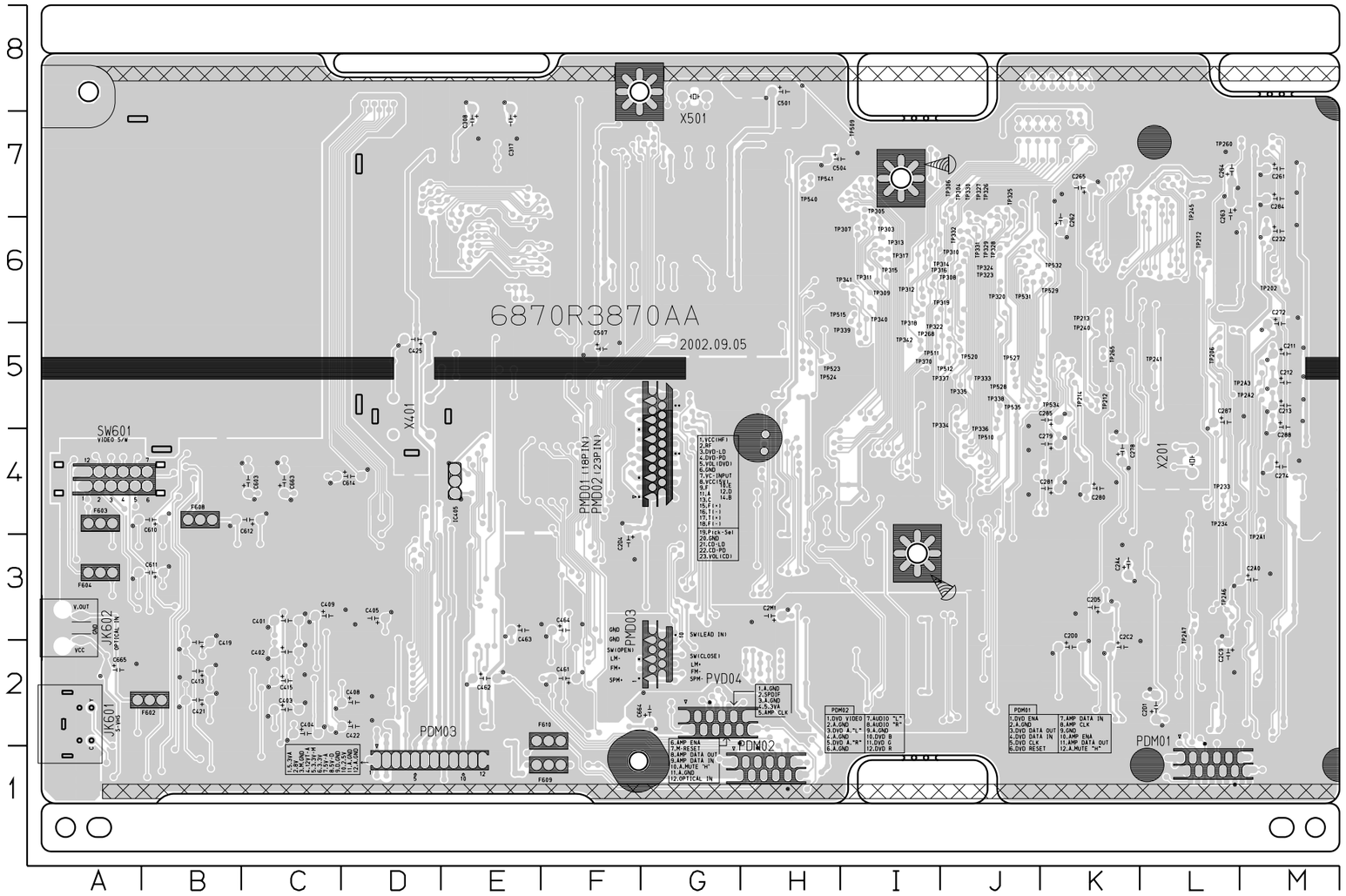
1. MAIN P.C.BOARD (TOP VIEW)



LOCATION GUIDE

C201	D4	C294	B6	C304	E5	C503	F7	C665	M2	L604	M1	PIN0256	L3	R292	C6	R2M5	E2	R363	C7	R461	H2	TP216	C5
C202	A4	C295	C7	C305	D4	C504	F7	C666	M2	P3301	C8	PIN0257	L3	R293	B4	R2M6	E2	R364	D4	R462	H2	TP261	D6
C203	C6	C296	C6	C306	E3	C506	I5	D2A1	C2	PDM01	B1	PIN0261	C4	R294	B4	R2M7	E2	R365	D4	R463	I2	TP264	B5
C204	B6	C2A0	A3	C307	I6	C507	H5	D2A2	C2	PDM02	G1	PIN0262	J2	R2A0	C3	R2M8	E2	R366	D4	R464	I2	TP267	D5
C205	A5	C2A3	B3	C308	I7	C508	H6	D2A3	B3	PDM03	J1	PIN0265	L3	R2A1	H4	R2M9	E2	R367	D3	R465	I2	TP269	D5
C206	A6	C2A4	C3	C309	I7	C509	H6	D603	K3	PIN0001	C6	PIN0272	L1	R2A2	C3	R2N0	E2	R3F1	D4	R466	I2	TP270	D5
C207	C4	C2A5	B3	C314	I6	C510	H6	D604	K1	PIN0008	K2	PIN0275	L2	R2A6	B3	R2N1	E2	R3F2	D6	R467	H2	TP2A0	C4
C208	B5	C2A6	C3	C316	D4	C511	H6	F602	L2	PIN0009	K2	PIN0278	L2	R2A9	A2	R2N2	E2	R3F3	E7	R468	H6	TP2A4	B2
C209	B5	C2A7	B3	C317	I7	C512	H6	F603	M4	PIN0010	K2	PMD01	G4	R2B0	D2	R2N3	E2	R3F4	E6	R501	F6	TP2A5	C2
C210	A5	C2A8	B3	C318	J7	C513	H7	F604	M3	PIN0011	L2	PMD02	G4	R2B1	C2	R2N4	E2	R3F5	D6	R503	F6	TP2A8	H4
C211	A5	C2A9	B3	C319	J6	C514	H7	F605	L4	PIN0013	L3	PMD03	G2	R2B2	C2	R2N5	E2	R401	J3	R504	F7	TP2A9	I4
C212	A5	C2B0	C3	C320	J6	C515	H7	F609	H1	PIN0014	K2	PVD04	G2	R2B3	C2	R2N6	E2	R403	K2	R505	G7	TP2T0	B6
C213	A5	C2B3	B3	C3F1	D7	C516	H7	F610	H2	PIN0016	L2	Q2A1	C2	R2B4	C2	R2N7	E2	R404	K2	R506	F7	TP2T1	B6
C214	C5	C2B4	B3	C3F2	E6	C517	H7	IC201	B5	PIN0017	K2	Q2A2	C2	R2B5	B2	R2N8	G3	R405	L2	R514	J2	TP2T3	B6
C215	C5	C2B5	B3	C401	K3	C518	H7	IC203	B7	PIN0018	I3	Q2A5	B3	R2B6	C2	R2N9	G2	R406	K2	R515	J2	TP301	E4
C216	C5	C2B8	B2	C402	K2	C519	H7	IC206	B4	PIN0020	H3	Q2A6	B4	R2B7	C2	R2P0	E2	R407	K2	R516	J2	TP343	D4
C224	A6	C2B9	B2	C403	K2	C520	G7	IC2A1	B3	PIN0022	H3	Q2M1	F2	R2B8	C2	R2P1	G2	R409	L2	R520	J2	TP344	E4
C225	A5	C2C1	B2	C404	K2	C521	G7	IC2A2	A4	PIN0023	I5	Q605	L3	R2B9	B2	R2P2	F2	R410	K2	R521	C7	TP345	E4
C226	A5	C2C2	C2	C405	J3	C522	G7	IC2A4	B2	PIN0024	I4	Q606	L1	R2C0	A2	R2P3	F2	R411	K2	R522	F7	TP346	D4
C229	A4	C2C3	B2	C406	J3	C523	H5	IC2M1	F2	PIN0027	H2	Q607	L1	R2C4	B3	R2P7	F2	R412	L2	R523	C7	TP347	D4
C230	A5	C2C4	B2	C408	J2	C525	F7	IC301	E4	PIN0028	I2	Q608	L3	R2C5	B3	R2P8	E2	R413	L2	R524	H4	TP348	D4
C231	B5	C2C5	B2	C409	K3	C526	F7	IC305	I6	PIN0029	I4	Q615	K1	R2C6	C3	R2P9	E2	R414	K2	R525	H6	TP349	E4
C232	A6	C2C6	B2	C410	L2	C527	F6	IC3F1	E6	PIN0037	K3	R201	A5	R2C7	C3	R2Q1	E2	R415	K2	R530	H4	TP363	C7
C238	C4	C2C7	B2	C411	K2	C528	F6	IC401	J2	PIN0038	K3	R202	A4	R2C8	C3	R2R1	H5	R416	L2	R531	H4	TP365	E5
C239	C4	C2C8	B2	C412	L2	C529	F6	IC402	L2	PIN0040	K1	R203	A4	R2C9	C3	R2R2	G5	R417	L2	R532	H4	TP366	E5
C240	C4	C2C9	B2	C413	L2	C530	F6	IC403	I3	PIN0130	B4	R204	A4	R2D0	A2	R302	D4	R418	K2	R533	I4	TP367	E5
C242	C4	C2D0	C2	C414	K2	C531	G6	IC404	I5	PIN0138	F4	R207	B4	R2D1	C3	R303	D4	R419	L2	R534	H4	TP369	E4
C245	C4	C2D1	B2	C415	K2	C532	G6	IC405	I4	PIN0139	F4	R217	C4	R2D2	C3	R306	E3	R420	L2	R535	H4	TP501	H8
C251	A6	C2D2	C2	C416	L2	C533	G6	IC406	I2	PIN0147	D4	R218	D4	R2D3	C3	R307	E3	R421	I3	R541	H4	TP506	G7
C252	A6	C2D3	C2	C417	L2	C534	G6	IC501	G6	PIN0152	H4	R219	D4	R2D4	C3	R308	E3	R422	I3	R588	F8	TP513	F5
C253	A6	C2D4	H3	C418	L2	C535	H6	IC502	I4	PIN0153	I4	R220	D4	R2D5	B3	R309	E4	R428	J2	R589	F8	TP514	G6
C254	A6	C2D5	C3	C419	L2	C536	H6	IC503	H4	PIN0162	I6	R230	C6	R2D6	H5	R310	E3	R429	J2	R590	F8	TP516	F6
C255	A5	C2D6	G4	C420	L2	C538	F7	IC506	F7	PIN0170	K2	R231	C6	R2D8	B2	R314	F4	R430	J2	R591	G8	TP517	F6
C258	A5	C2D7	A2	C421	L2	C539	G7	IC601	K4	PIN0171	K2	R232	D6	R2D9	B2	R315	F3	R431	J2	R597	F6	TP518	F5
C260	C4	C2D9	B3	C422	J2	C540	G7	JK601	M2	PIN0172	I3	R233	C6	R2E6	B3	R316	E4	R432	J2	R605	K1	TP519	D5
C261	A7	C2E1	C2	C423	K2	C541	G7	JK602	M3	PIN0173	I3	R234	D6	R2E7	B3	R317	E3	R433	J2	R606	L3	TP521	F5
C262	C6	C2E2	D3	C424	K2	C542	I4	L201	C4	PIN0174	I3	R235	C6	R2E8	B3	R318	D4	R434	J2	R607	K1	TP522	D5
C263	B7	C2E3	C3	C425	J5	C543	G7	L203	A6	PIN0175	I3	R236	D6	R2E9	A3	R319	D4	R435	J2	R608	K2	TP525	G5
C264	B7	C2E4	C3	C426	J5	C544	I4	L206	A7	PIN0176	H5	R237	C6	R2F1	B4	R320	D4	R436	J2	R609	L3	TP526	D5
C265	C7	C2E5	C3	C427	H3	C546	H4	L207	A4	PIN0177	H5	R239	A6	R2F2	B4	R321	D4	R437	I5	R610	L4	TP530	C5
C272	A5	C2E6	C3	C428	H3	C549	H4	L2A1	A3	PIN0178	H5	R240	A6	R2F3	B4	R322	F4	R438	I5	R611	L4	TP533	C6
C273	A5	C2M1	F3	C429	H3	C550	H4	L2A2	G4	PIN0181	I5	R241	A6	R2F4	B4	R323	E4	R439	I5	R612	M4	TP536	F5
C274	A4	C2M2	E2	C430	I3	C551	H4	L301	F4	PIN0182	I5	R242	A6	R2F5	B2	R327	D3	R440	H5	R622	K3	X201	B4
C278	C4	C2M3	E2	C431	I5	C552	H4	L302	I7	PIN0183	I5	R243	A6	R2F6	B2	R350	D7	R441	I5	R623	K3	X401	J5
C279	C4	C2M4	E2	C432	I5	C553	H4	L3F1	D7	PIN0184	I5	R252	C5	R2F7	B2	R351	D7	R442	I5	R625	L3	X501	G8
C280	C4	C2M5	E2	C433	I4	C562	H7	L401	I3	PIN0189	I5	R273	C4	R2F8	B2	R352	D7	R443	I5	R626	L3	ZD635	L1
C281	C4	C2M6	F2	C434	I3	C603	K4	L402	I4	PIN0191	I5	R274	C4	R2F9	B2	R353	D7	R444	I5	R627	K3	ZD636	L1
C284	A7	C2M7	F2	C435	I3	C606	K1	L450	J5	PIN0195	H5	R275	C4	R2G1	B2	R354	D7	R445	H5	R652	K4	ZD637	L2
C285	C5	C2M8	F2	C461	H2	C610	L4	L451	I5	PIN0198	H6	R276	C4	R2G2	B2	R355	D7	R446	H5	R653	K4	ZD638	L2
C286	C5	C2M9	F2	C462	I2	C611	L3	L460	I3	PIN0237	I4	R277	C4	R2G3	B2	R356	C7	R447	H5	R674	H2	ZD639	L2
C287	B5	C2N1	E2	C463	I3	C612	K4	L502	H5	PIN0238	I4	R278	A5	R2G4	B2	R357	C7	R448	H5	R675	H2	ZD640	L2
C288	A5	C2N3	F2	C464	H3	C613	K3	L503	F7	PIN0242	H4	R279	A5	R2G7	B3	R358	C7	R450	I5	R676	H2		
C290	B4	C2N4	E2	C465	H2	C614	J4	L504	F7	PIN0243	F7	R281	A6	R2H9	B4	R359	C7	R452	H5	SW601	M4		
C291	B4	C301	E4	C466	I3	C616	H2	L505	I4	PIN0246	L1	R282	B5	R2M1	E3	R360	C7	R453	I4	TP201	C6		
C292	B4	C302	F4	C467	I2	C663	K4	L601	M1	PIN0247	M1	R290	C6	R2M2	E3	R361	C7	R454	I5	TP205	B5		
C293	B7	C303	E5	C501	F8	C664	G2	L603	M1	PIN0255	B3	R291	B4	R2M3	E3	R362	C7	R460	I2	TP215	B5		

2. MAIN P.C.BOARD (BOTTOM VIEW)



LOCATION GUIDE

PIN0030	F3	TP316	I6
PIN0051	L3	TP317	I6
PIN0084	L5	TP318	I6
PIN0200	F7	TP319	J6
PIN0204	F7	TP320	J6
PIN0205	F7	TP322	J5
PIN0206	F7	TP323	J6
PIN0248	J7	TP324	J6
PIN0249	J7	TP325	J7
PIN0250	J7	TP326	J7
PIN0251	K7	TP327	J7
PIN0252	K8	TP328	J6
TP202	M6	TP329	J6
TP206	L5	TP330	J7
TP212	K5	TP331	J6
TP213	K6	TP332	J6
TP214	K5	TP333	J5
TP233	L4	TP334	J5
TP234	L4	TP335	J5
TP240	K5	TP336	J4
TP241	L5	TP337	J5
TP245	L7	TP338	J5
TP260	M7	TP339	I5
TP265	K5	TP340	I6
TP268	J5	TP341	I6
TP2A1	M4	TP342	I5
TP2A2	M5	TP370	I5
TP2A3	M5	TP509	I7
TP2A6	L3	TP510	J4
TP2A7	L3	TP511	I5
TP2T2	L6	TP512	J5
TP303	I6	TP515	I6
TP304	J6	TP520	J5
TP305	I6	TP523	H5
TP306	J7	TP524	H5
TP307	I6	TP527	J5
TP308	I6	TP528	J5
TP309	I6	TP529	K6
TP310	I6	TP531	J6
TP311	I6	TP532	J6
TP312	I6	TP534	J5
TP313	I6	TP535	J5
TP314	I6	TP540	H7
TP315	I6	TP541	H7

MEMO

MEMO

• CIRCUIT VOLTAGE CHART

MODE / PIN NO.	EE	PLAY
IC101		
1	5.23	5.22
2	0	0
3	1.75	1.99
4	0	0
5	4.91	4.91
6	NC	NC
7	0.54	1.88
8	0.54	1.88
9	4.91	4.91
10	0	0
11	4.77	4.77
12	0.12	0.12
13	4.72	4.72
14	0	0
15	0	0
16	0	0
17	0	0
18	0	0
19	0	0
20	0	0
21	0	0
22	3.24	3.22
23	0.91	0.91
24	1.65	1.65
25	0	0
26	0	0
27	1.99	1.93
28	3.12	3.12
29	3.26	3.25
30	3.12	3.12
31	4.65	4.65
32	NC	NC
33	NC	NC
34	NC	NC
35	0	0
36	4.91	4.91
37	3.25	3.24
38	4.91	4.91
39	0	0
40	3.22	3.2
41	NC	NC
42	NC	NC
43	NC	NC
44	NC	NC
45	NC	NC
46	4.91	4.9
47	2.08	2.03
48	2.07	2.07
49	4.91	4.9
50	NC	NC
51	5.09	5.08
52	0	0
53	4.91	4.91
54	2.16	2.1

MODE / PIN NO.	EE	PLAY
55	2.04	1.96
56	0	0
57	2.36	2.36
58	2.42	2.42
59	4.9	4.91
60	2.4	2.4
61	1.8	1.9
62	4.9	4.9
63	0	0
64	5.23	5.22
IC102		
1	4.93	4.93
2	0	0
3	4.93	4.93
IC103		
1	3.72	3.71
2	0	0
3	4.93	4.93
IC104		
1	6.04	6.04
2	6.04	6.04
3	6.04	6.04
4	0	0
5	6.04	6.04
6	6.04	6.04
7	6.04	6.04
8	12.09	12.08
Q101		
B	4.85	4.58
E	0	0
C	0.01	0.01
IC710		
1	0	0
2	15.6	15.6
3	15.6	15.6
4	3.59	31.58
5	0	0
6	0	0
7	31.59	31.58
8	15.62	15.62
9	15.62	15.62
10	15.61	15.61
11	15.61	15.61
12	31.59	31.59
13	0	0
14	0	0
15	31.59	31.59
16	15.61	15.61
17	15.61	15.61
18	NC	NC
19	0	0
20	0.02	0.02
21	5.02	5.02
22	5.02	5.02
23	3.25	3.24

MODE / PIN NO.	EE	PLAY
24	0	0
25	3.15	3.15
26	3.15	3.15
27	3.15	3.15
28	3.24	3.23
29	1.58	1.57
30	1.58	1.57
31	1.58	1.57
32	1.58	1.57
33	26.32	26.31
34	26.32	26.31
35	31.58	31.57
36	31.58	31.57
IC730		
1	0	0
2	15.6	15.6
3	15.6	15.6
4	31.59	31.58
5	0	0
6	0	0
7	31.59	31.58
8	15.62	15.62
9	15.62	15.62
10	15.61	15.61
11	15.61	15.61
12	31.59	31.59
13	0	0
14	0	0
15	31.59	31.59
16	15.61	15.61
17	15.61	15.61
18	NC	NC
19	0	0
20	0.02	0.02
21	5.02	5.02
22	5.02	5.02
23	3.24	3.23
24	0	0
25	3.15	3.15
26	3.15	3.15
27	3.15	3.15
28	3.24	3.23
29	1.58	1.57
30	1.58	1.57
31	1.58	1.57
32	1.58	1.57
33	26.3	26.3
34	26.3	26.3
35	31.58	31.57
36	31.58	31.57
IC750		
1	0	0
2	15.6	15.6
3	15.6	15.6
4	31.59	31.58

MODE / PIN NO.	EE	PLAY
5	0	0
6	0	0
7	31.59	31.58
8	15.62	15.62
9	15.62	15.62
10	15.61	15.61
11	15.61	15.61
12	31.59	31.59
13	0	0
14	0	0
15	31.59	31.59
16	15.61	15.61
17	15.61	15.61
18	NC	NC
19	0	0
20	0.03	0.03
21	5.06	5.06
22	5.06	5.06
23	3.24	3.23
24	0	0
25	3.15	3.15
26	3.15	3.15
27	3.15	3.15
28	3.24	3.23
29	1.58	1.57
30	1.58	1.57
31	1.58	1.57
32	1.58	1.57
33	26.3	26.3
34	26.3	26.3
35	31.58	31.57
36	31.58	31.57
IC201		
1	2.46	2.44
2	0	0
3	0	0.92
4	2.46	2.44
5	0	0
6	2.46	2.44
7	0	0
8	2.46	2.44
9	2.46	2.44
10	2.46	2.44
11	2.46	2.44
12	0	2.44
13	0	0
14	2.46	2.44
15	2.46	2.44
16	2.46	2.44
17	2.46	2.44
18	2.46	2.44
19	0.04	0.04
20	2.46	2.44
21	2.46	2.44
22	0.14	0.19

MODE / PIN NO.	EE	PLAY
23	2.46	2.44
24	0	0
25	1.6	1.58
26	1.63	1.62
27	1.335	1.34
28	1.59	1.58
29	1.63	1.62
30	1.68	1.67
31	0	0
32	1.99	1.96
33	1.37	1.29
34	2.5	2.47
35	0	0
36	3.25	3.23
37	2.5	2.45
38	2.5	2.45
39	0	0.8
40	0	0.35
41	0	1.37
42	1.63	1.62
43	1.6	1.58
44	1.62	1.61
IC205		
1	1.38	1.37
2	1.59	1.58
3	1.62	1.62
4	1.62	1.61
5	2.23	2.23
6	0	0
7	4.9	4.9
8	2.23	2.23
IC401		
1	1.62	1.62
2	0.07	0.07
3	3.26	3.26
4	2.44	2.44
5	2.44	2.44
6	4.92	4.92
7	0	0
8	2.22	2.22
9	3.23	3.25
10	1.61	1.62
11	0	0
12	3.91	3.93
IC402		
14	0	0
15	0	0
16	1.58	1.59
17	1.62	1.63
18	0.14	0.2
19	3.25	3.26
20	NC	NC
21	1.67	1.68
22	0	0
23	3.25	3.26

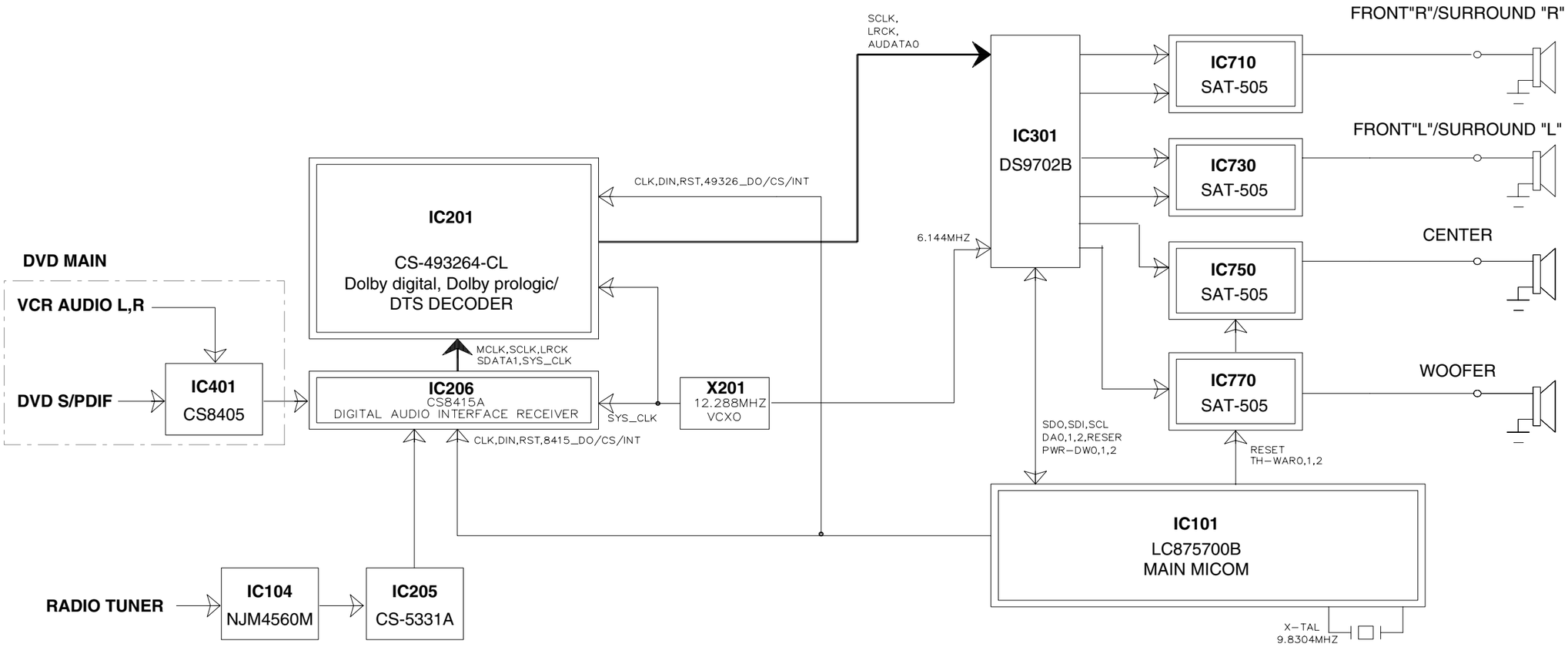
MODE / PIN NO.	EE	PLAY
24	0	0
25	0	0
26	0	0
27	0.07	0.07
28	0.38	0.38
IC301		
1	0	0
2	0	0
3	3.21	3.18
4	4.91	4.91
5	3.21	3.18
6	2.95	2.92
7	1.72	1.7
8	0	0
9	0	0
10	0	0
11	0	0
12	0	0
13	0	0
14	0	0
15	3.21	3.18
16	0	0
17	0	0.9
18	0	0
19	0	0
20	0	0
21	0	0.9
22	1.59	1.6
23	1.63	1.62
24	3.22	3.18
25	0	0
26	0	0.9
27	0	0
28	0	0
29	0	0
30	NC	NC
31	NC	NC
32	3.21	3.18
33	0	0
34	NC	NC
35	NC	NC
36	NC	NC
37	0	0
38	1.6	1.59
39	NC	NC
40	3.21	3.18
41	0	0
42	NC	NC
43	0	0
44	NC	NC
45	NC	NC
46	3.21	3.18
47	0	0
48	NC	NC
49	NC	NC

MODE / PIN NO.	EE	PLAY
50	0	0
51	3.21	318
52	0	0
53	1.59	1.58
54	1.59	1.58
55	0	0
56	1.59	1.58
57	1.59	1.58
58	3.21	3.18
59	0	0
60	1.59	1.58
61	1.59	1.58
62	0	0
63	1.59	1.58
64	1.59	1.59
65	3.21	3.18
66	0	0
67	1.59	1.58
68	1.59	1.58
69	0	0
70	1.59	1.58
71	1.59	1.58
72	3.21	3.18
73	0	0
74	0	0
75	0	0
76	3.1	3.09
77	3.21	3.18
78	0	0
79	3.22	3.2
80	0	0
81	3.21	3.18
82	3.21	3.18
83	0	0
84	3.21	3.18
85	0	0
86	1.67	1.67
87	NC	NC
88	NC	NC
89	0	0
90	3.21	3.18
91	0	0
92	3.25	3.24
93	0	0
94	0	0
95	0	0
96	0	0
97	NC	NC
98	0	0
99	3.21	3.18
100	0	0

ELECTRIC POLARITY CAPACITOR

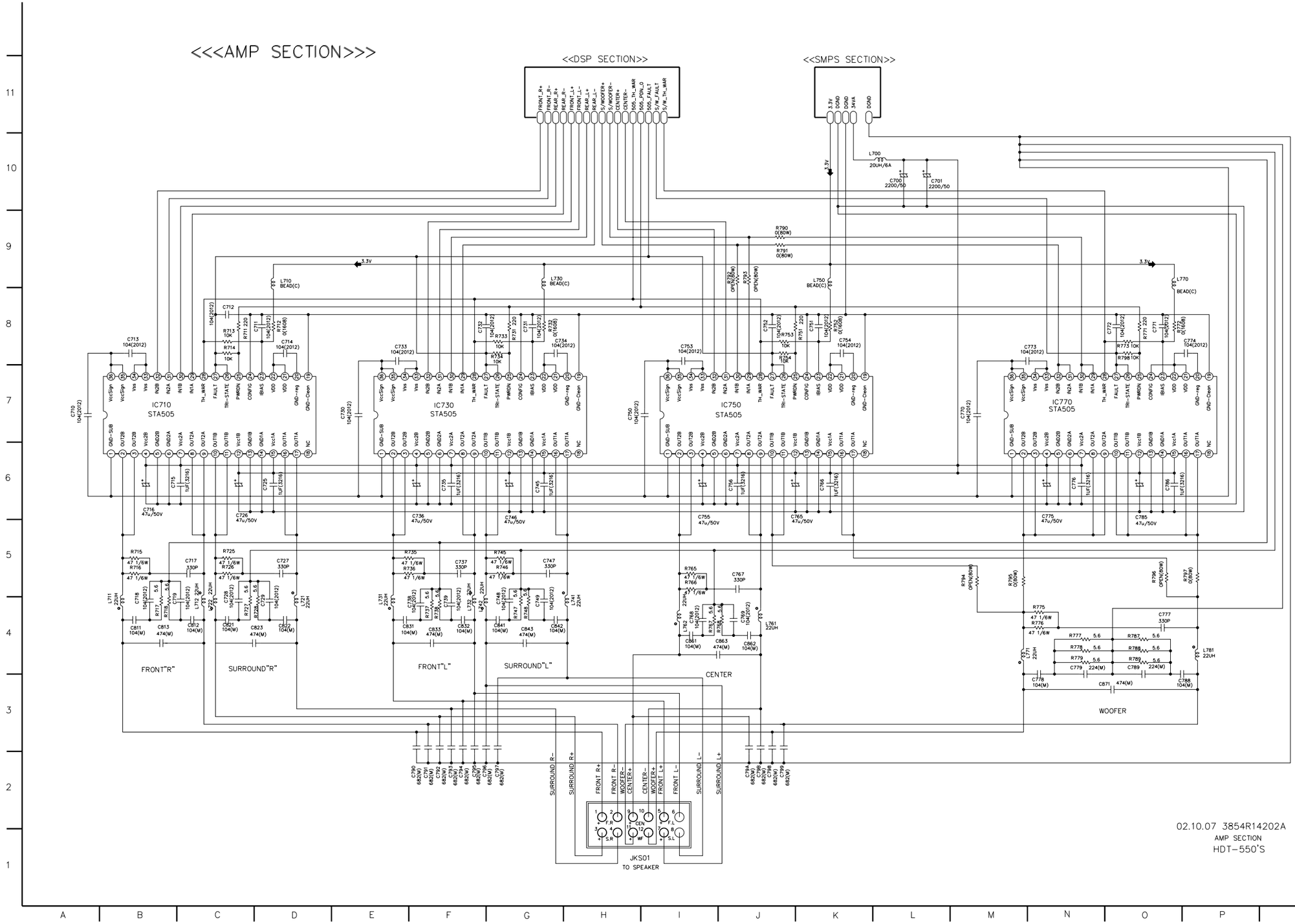
Location No.	EE		PLAY	
	+	-	+	-
C105	4.94	0	4.94	0
C108	12.13	0	12.12	0
C110	4.94	0	4.94	0
C124	6.04	0	6.04	0
C124	6.04	0	6.04	0
C126	6.04	0	6.04	0
C127	12.08	0	12.08	0
C133	12.13	0	12.13	0
C134	4.94	0	4.94	0
C135	4.94	0	4.94	0
C136	3.25	0	3.25	0
C202	3.25	0	3.24	0
C204	2.45	0	2.44	0
C206	2.45	0	2.44	0
C207	2.45	0	2.45	0
C213	2.48	0	2.47	0
C214	2.47	1.95	2.47	1.95
C226	4.93	0	4.92	0
C228	3.25	0	3.25	0
C229	2.48	0	2.47	0
C236	4.93	0	4.93	0
C301	3.21	0	3.19	0
C323	3.19	0	3.18	0
C327	3.2	0	3.19	0
C700	31.58	0	31.58	0
C701	31.58	0	31.58	0
C716	31.59	0	31.58	0
C726	31.59	0	31.59	0
C736	31.59	0	31.58	0
C746	31.59	0	31.59	0
C755	31.59	0	31.58	0
C765	31.59	0	31.59	0
C775	31.59	0	31.58	0
C785	31.59	0	31.59	0

BLOCK DIAGRAM



CIRCUIT DIAGRAMS

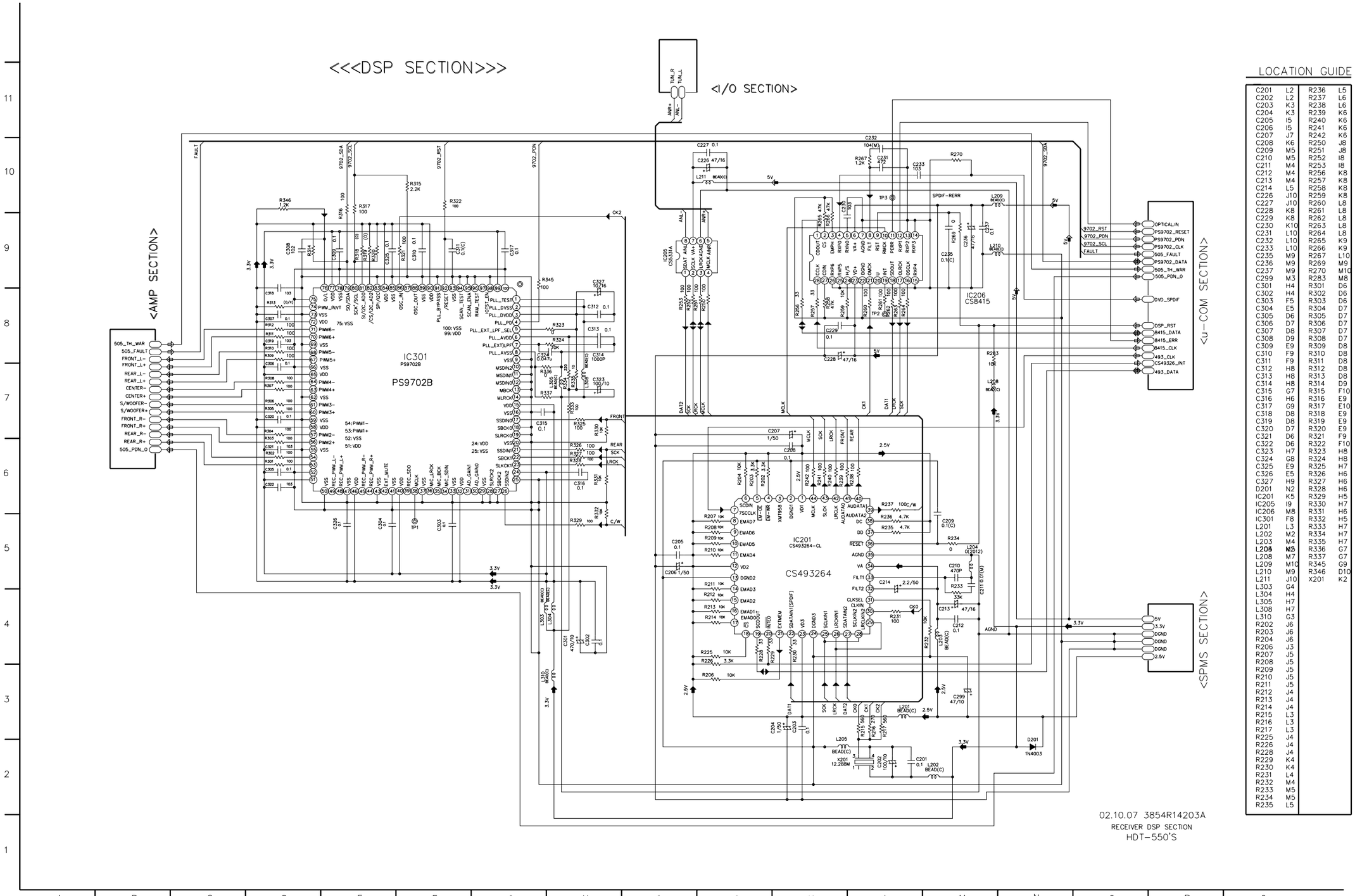
1. AMP CIRCUIT DIAGRAMS



LOCATION GUIDE

C700	L10	L721	D4
C701	L10	L722	C4
C710	A7	L730	G9
C711	D8	L731	E4
C712	C8	L732	F4
C713	B8	L741	H4
C714	D8	L742	F4
C715	B6	L750	K9
C716	B6	L761	J4
C717	C5	L762	I4
C718	B4	L770	O9
C719	B4	L771	N4
C725	D6	L781	P4
C726	C6	R711	C8
C727	D5	R712	D8
C728	C4	R713	C8
C729	D4	R714	C8
C730	E7	R715	B5
C731	G8	R716	B5
C732	F8	R717	B4
C733	E8	R718	B4
C734	G8	R725	C5
C735	F6	R726	C5
C736	F6	R727	C4
C737	F5	R728	D4
C738	F4	R731	G8
C739	F4	R732	G8
C745	G6	R733	G8
C746	G6	R734	G8
C747	G5	R735	E5
C748	G4	R736	E5
C749	G4	R737	F4
C750	H7	R738	F4
C751	K8	R745	G5
C752	J8	R746	G5
C753	I8	R747	G4
C754	K8	R748	G4
C755	I6	R751	K8
C756	J6	R752	K8
C765	J6	R753	J8
C766	K6	R754	J8
C767	J5	R765	I5
C768	I4	R766	I5
C769	J4	R767	I4
C770	M7	R768	J4
C771	O8	R771	O8
C772	O8	R772	O8
C773	M8	R773	O8
C774	P8	R775	N4
C775	N6	R776	N4
C776	N6	R777	N4
C777	O4	R778	N4
C778	N3	R779	N4
C779	N4	R787	O4
C785	O6	R788	O4
C786	O6	R789	O4
C788	O3	R790	J9
C789	O4	R791	J9
C790	F2	R792	J9
C791	F2	R793	J9
C792	F2	R794	M5
C793	F2	R795	M5
C794	F2	R796	O5
C795	F2	R797	P5
C796	G2	R798	O8
C797	G2		
C798	J2		
C799	J2		
C79A	J2		
C79B	J2		
C811	B4		
C812	C4		
C813	B4		
C821	C4		
C822	D4		
C823	C4		
C831	E4		
C832	F4		
C833	F4		
C841	G4		
C842	G4		
C843	G4		
C861	I4		
C862	J4		
C863	I4		
C871	N3		
IC710	B7		
IC730	F7		
IC750	J7		
IC770	N7		
JKS01	H1		
L700	K10		
L710	D9		
L711	B4		
L712	C4		

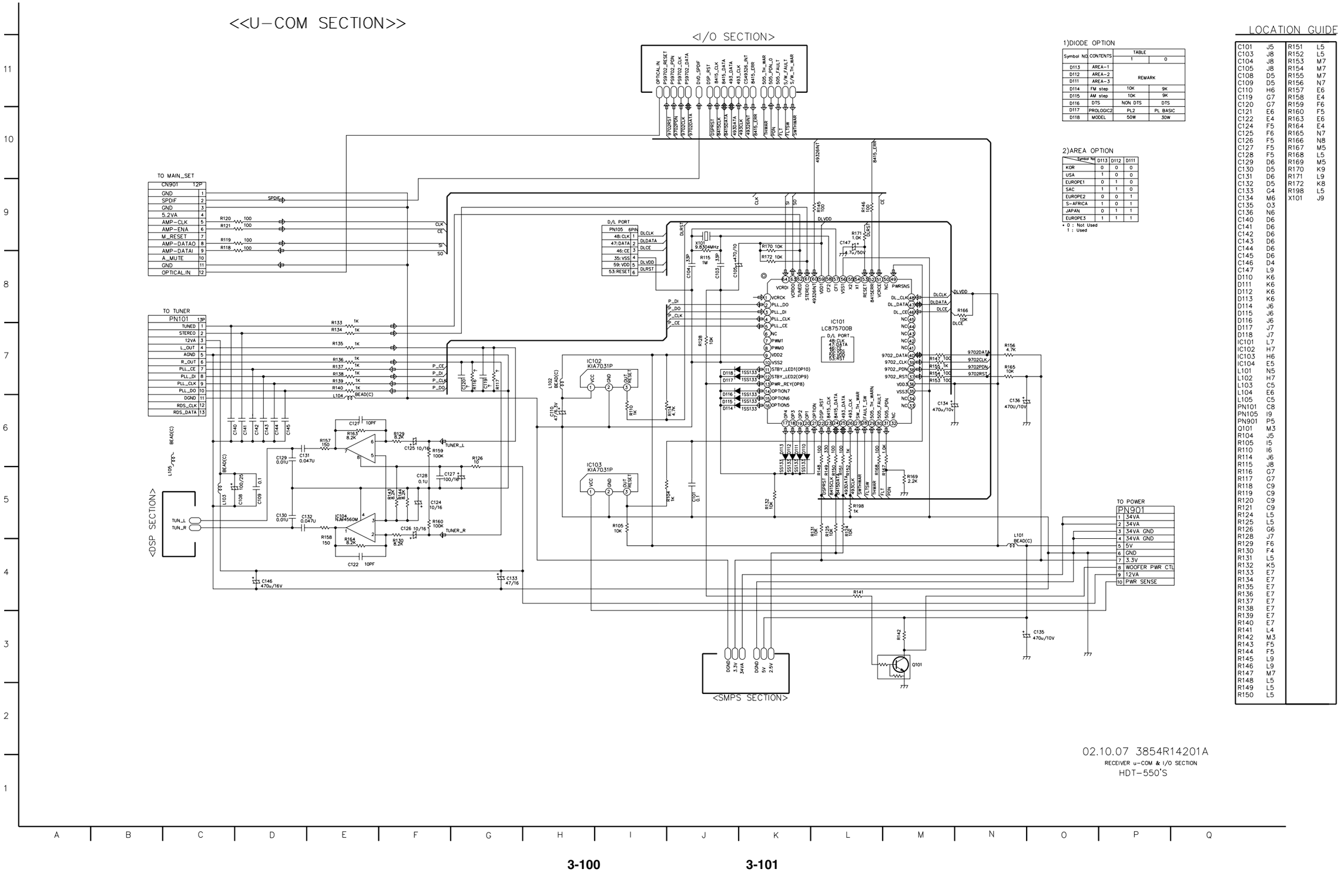
2. DSP(DIGITAL AUDIO PROCESSING) CIRCUIT DIAGRAMS



LOCATION GUIDE

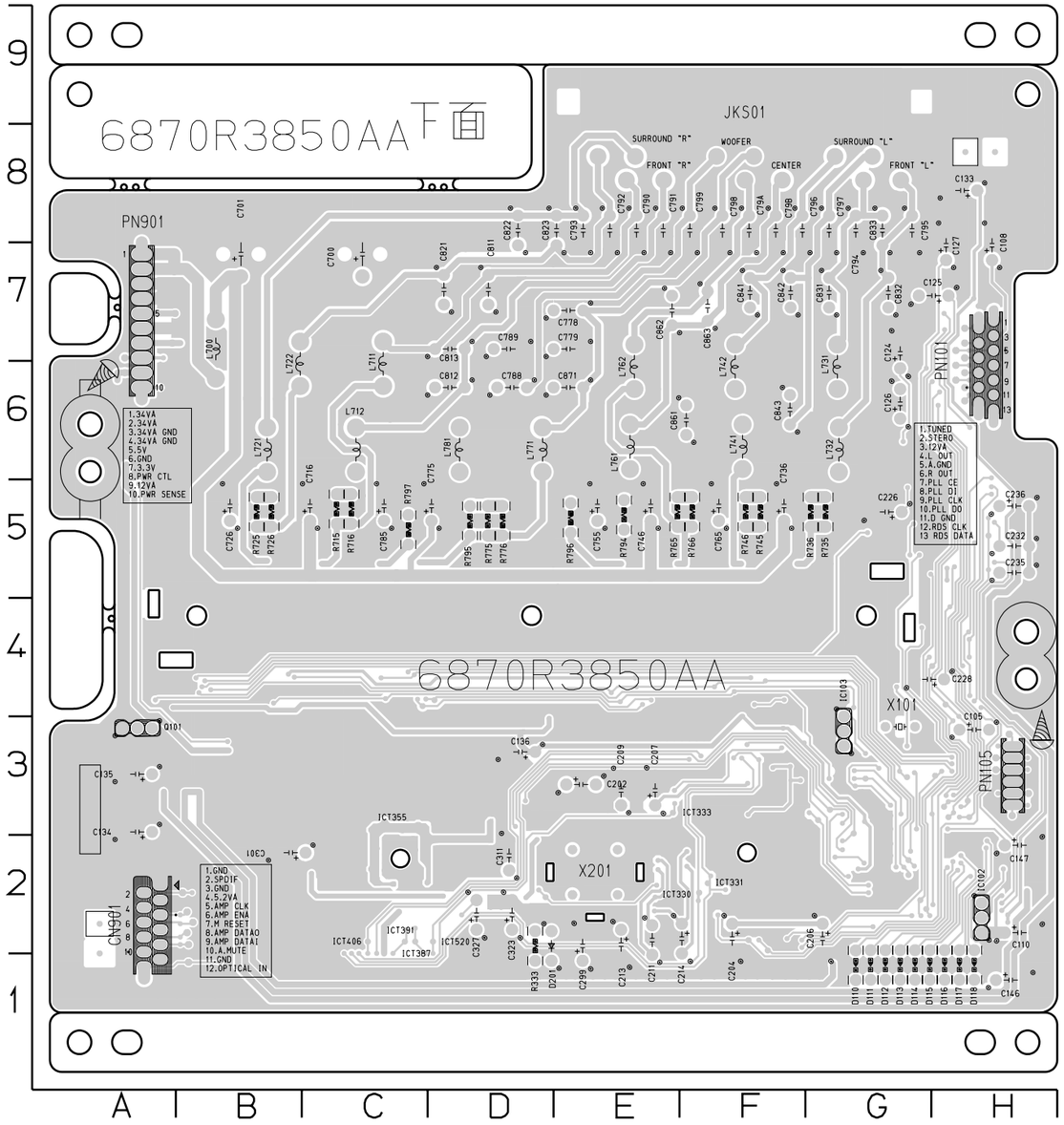
C201	L2	R236	L5
C202	L2	R237	L6
C203	K3	R238	L6
C204	K3	R239	K6
C205	I5	R240	K6
C206	I5	R241	K6
C207	J7	R242	K6
C208	K6	R250	J8
C209	M5	R251	J8
C210	M5	R252	I8
C211	M4	R253	I8
C212	M4	R256	K8
C213	M4	R257	K8
C214	L5	R258	K8
C226	J10	R259	K8
C227	J10	R260	L8
C228	K8	R261	L8
C229	K8	R262	L8
C230	K10	R263	L8
C231	L10	R264	L8
C232	L10	R265	K9
C233	L10	R266	K9
C235	M9	R267	L10
C236	M9	R269	M9
C237	M9	R270	M10
C299	M3	R283	M8
C301	H4	R301	D6
C302	H4	R302	D6
C303	F5	R303	D6
C304	E5	R304	D7
C305	D6	R305	D7
C306	D7	R306	D7
C307	D8	R307	D7
C308	D9	R308	D7
C309	E9	R309	D8
C310	F9	R310	D8
C311	F9	R311	D8
C312	H8	R312	D8
C313	H8	R313	D8
C314	H8	R314	D9
C315	G7	R315	F10
C316	H6	R316	E9
C317	G9	R317	E10
C318	D8	R318	E9
C319	D8	R319	E9
C320	D7	R320	E9
C321	D6	R321	F9
C322	D6	R322	F10
C323	H7	R323	H8
C324	G8	R324	H8
C325	E9	R325	H7
C326	E5	R326	H6
C327	H9	R327	H6
D201	N2	R328	H6
IC201	K5	R329	H5
IC205	I9	R330	H7
IC206	M8	R331	H6
IC301	F8	R332	H5
L201	L3	R333	H7
L202	M2	R334	H7
L203	M4	R335	H7
L204	M5	R336	G7
L208	M7	R337	G7
L209	M10	R345	G9
L210	M9	R346	D10
L211	J10	X201	K2
L303	G4		
L304	H4		
L305	H7		
L308	H7		
L310	G3		
R202	J6		
R203	J6		
R204	J6		
R205	J3		
R207	J5		
R208	J5		
R209	J5		
R210	J5		
R211	J5		
R212	J4		
R213	J4		
R214	J4		
R215	L3		
R216	L3		
R217	L3		
R225	J4		
R226	J4		
R228	J4		
R229	K4		
R230	K4		
R231	L4		
R232	M4		
R233	M5		
R234	M5		
R235	L5		

3. μ-COM CIRCUIT DIAGRAMS



PRINTED CIRCUIT DIAGRAMS

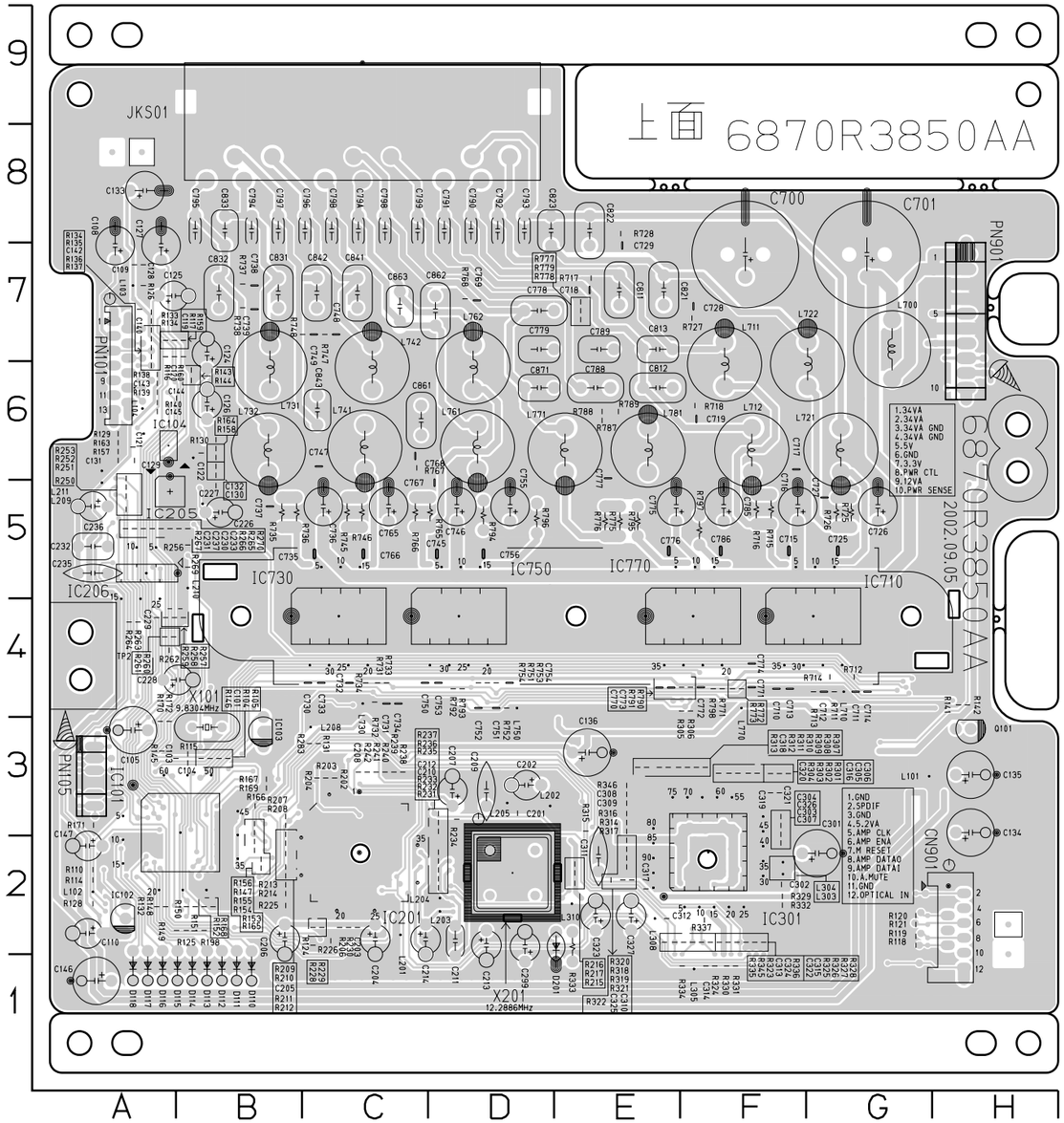
1. MAIN P.C.BOARD(SOLDER SIDE)



LOCATION GUIDE

ICT330	F2
ICT331	F2
ICT333	E3
ICT355	C3
ICT387	C2
ICT391	C2
ICT406	C2
ICT520	D2
PIN542396280	H3
PIN542396281	H3
PIN542396282	H3
PIN542396283	H3
PIN542396293	G2
PIN542396294	G2
PIN542396296	G3
PIN542396310	G3
PIN542396315	H4
PIN542396316	H4
PIN542396320	G3
PIN542396334	F2
PIN542396342	H5
PIN542396405	G2
PIN542396407	H3
PIN542396408	G3
PIN542396409	G2
PIN542396411	G3
PIN542396413	D2
PIN542396416	F2
PIN542396418	D4
PIN542396419	C4

2. MAIN P.C.BOARD



LOCATION GUIDE

C101	B3	C302	F2	C751	D4	D115	B1	L308	E2	PIN542396289	A2	PIN542396386	E3	R147	B3	R252	A5	R714	G4
C103	B3	C303	F3	C752	D4	D116	A1	L310	E2	PIN542396290	B2	PIN542396387	F3	R148	A2	R253	A6	R715	F5
C104	B3	C304	F3	C753	D4	D117	A1	L700	G7	PIN542396291	B2	PIN542396388	E3	R149	B2	R256	B5	R716	F5
C105	A3	C305	F3	C754	D4	D118	A1	L710	G4	PIN542396292	B2	PIN542396389	E3	R150	B2	R257	B4	R717	E7
C108	A7	C306	F3	C755	D5	D201	E2	L711	F6	PIN542396295	B2	PIN542396391	D4	R151	B2	R258	A4	R718	F6
C109	A7	C307	F2	C756	D5	IC101	B3	L712	F6	PIN542396300	B2	PIN542396392	D4	R152	B2	R259	A4	R725	G5
C110	A2	C308	E3	C765	C5	IC102	A2	L721	G6	PIN542396301	B2	PIN542396393	D4	R153	B2	R260	A4	R726	G5
C119	A7	C309	E3	C766	C5	IC103	B3	L722	G6	PIN542396302	B2	PIN542396394	E3	R154	B2	R261	A4	R727	F7
C120	A7	C310	E2	C767	D5	IC104	A6	L730	C4	PIN542396303	B3	PIN542396395	F3	R155	B2	R262	A4	R728	E8
C121	A6	C311	E2	C768	C6	IC201	C2	L731	B6	PIN542396311	B3	PIN542396397	F4	R156	B3	R263	A4	R731	C4
C122	B6	C312	E2	C769	D7	IC205	A5	L732	B6	PIN542396314	A3	PIN542396398	F4	R157	A6	R264	A4	R732	C4
C124	B7	C313	F2	C770	E4	IC206	A5	L741	C6	PIN542396317	A3	PIN542396399	E4	R158	B6	R265	B5	R733	C4
C125	A7	C314	F1	C771	F4	IC301	F2	L742	C6	PIN542396318	A3	PIN542396400	G4	R159	B7	R266	A5	R734	C4
C126	B6	C315	F2	C772	F4	IC710	G4	L750	D4	PIN542396321	B3	PIN542396401	C4	R160	B7	R267	A5	R735	B5
C127	A7	C316	F3	C773	E4	IC730	C4	L761	D6	PIN542396322	B3	PIN542396402	D4	R163	A6	R269	B5	R736	B5
C128	A7	C317	E2	C774	F4	IC750	D4	L762	D6	PIN542396323	B2	PIN542396403	F4	R164	B6	R270	B5	R737	B7
C129	A6	C318	E3	C775	E5	IC770	F4	L770	F4	PIN542396324	B2	PIN542396404	C2	R165	B2	R283	C3	R738	B7
C130	B6	C319	F3	C776	E5	IC1332	C3	L771	E6	PIN542396325	B2	PIN542396406	B3	R166	B3	R301	F3	R745	C5
C131	A6	C320	F3	C777	E6	IC1334	C3	L781	E6	PIN542396326	B2	PIN542396410	B1	R167	B3	R302	F3	R746	C5
C132	B6	C321	F3	C778	D7	IC1335	C3	PIN542396241	E3	PIN542396327	B2	PIN542396414	E2	R168	B2	R303	F3	R747	C7
C133	A8	C322	F2	C779	D7	IC1336	C3	PIN542396242	B3	PIN542396328	B2	PIN542396415	E2	R169	B3	R304	F3	R748	C7
C134	H3	C323	E2	C785	F5	IC1341	E3	PIN542396243	A6	PIN542396329	B2	PIN542396417	C3	R170	A3	R305	F4	R751	D4
C135	H3	C324	F2	C786	F5	IC1342	E3	PIN542396244	A6	PIN542396330	C2	PN101	A7	R171	A3	R306	F4	R752	D4
C136	E3	C325	E2	C788	E6	IC1343	F3	PIN542396245	B6	PIN542396331	C2	PN105	A3	R172	A3	R307	F3	R753	D4
C140	A7	C326	F3	C789	E7	IC1344	F3	PIN542396246	B6	PIN542396332	C2	PN901	H7	R198	B2	R308	F3	R754	D4
C141	A7	C327	E2	C790	D8	IC1345	F3	PIN542396247	A6	PIN542396333	C2	Q101	H3	R202	C3	R309	F3	R765	D5
C142	A7	C700	F7	C791	D8	IC1346	F3	PIN542396248	B6	PIN542396335	A6	R104	B3	R203	C3	R310	E3	R766	C5
C143	A6	C701	G7	C792	D8	IC1347	F3	PIN542396249	A6	PIN542396336	A5	R105	B3	R204	C3	R311	E3	R767	C6
C144	B6	C710	F4	C793	D8	IC1349	F3	PIN542396250	B6	PIN542396337	A5	R110	A2	R206	C2	R312	E3	R768	D7
C145	A6	C711	G4	C794	B8	IC1350	F3	PIN542396251	A5	PIN542396338	A5	R114	A2	R207	B3	R313	E3	R771	F4
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C147	A2	C713	F4	C796	C8	IC1352	F3	PIN542396253	A5	PIN542396340	B5	R116	A7	R209	B3	R315	E3	R773	F4
C201	D3	C714	G4	C797	B8	IC1360	C3	PIN542396254	E3	PIN542396341	A5	R117	A7	R210	B2	R316	E3	R775	E5
C202	D3	C715	F5	C798	C8	IC1361	C3	PIN542396256	F1	PIN542396343	A4	R118	G2	R211	B2	R317	E3	R776	E5
C203	C2	C716	F5	C799	C8	IC1362	C2	PIN542396257	F4	PIN542396344	A4	R119	G2	R212	B2	R318	E2	R777	E7
C204	C2	C717	F6	C79A	C8	IC1363	C2	PIN542396258	G4	PIN542396345	A4	R120	G2	R213	B2	R319	E2	R778	E7
C205	B2	C718	E7	C79B	C8	IC1370	C2	PIN542396259	G4	PIN542396346	A4	R121	G2	R214	B2	R320	E2	R779	E7
C206	B2	C719	F6	C811	E7	IC1382	C3	PIN542396260	F4	PIN542396348	A4	R124	C2	R215	E2	R321	E2	R787	E6
C207	D3	C725	G5	C812	E6	IC1383	C3	PIN542396261	G4	PIN542396349	A4	R125	B2	R216	E2	R322	E2	R788	E6
C208	C3	C726	G5	C813	E7	IC1384	C3	PIN542396262	G4	PIN542396350	A4	R126	A7	R217	E2	R323	E2	R789	E6
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C214	C2	C732	C4	C833	B8	L103	A7	PIN542396268	C4	PIN542396356	F2	R133	A7	R231	D2	R329	F2	R795	E5
C226	B5	C733	C4	C841	C7	L104	A6	PIN542396269	D4	PIN542396357	F2	R134	A7	R232	D2	R330	F1	R796	D5
C227	B5	C734	C4	C842	C7	L201	C2	PIN542396270	D4	PIN542396358	F2	R135	A7	R233	D2	R331	F1	R797	F5
C228	B4	C735	C5	C843	C6	L202	D3	PIN542396271	D4	PIN542396370	E3	R136	A7	R234	D3	R332	F2	R798	F4
C229	A4	C736	C5	C861	C6	L203	D2	PIN542396272	D4	PIN542396371	E3	R137	A6	R235	D3	R333	E2	TP1	F2
C230	A5	C737	B5	C862	D7	L204	D2	PIN542396273	E4	PIN542396372	E2	R138	A6	R236	D3	R334	F1	TP2	A4
C231	A5	C738	B7	C863	C7	L205	D3	PIN542396274	F4	PIN542396373	E2	R139	A6	R237	D3	R335	E2	TP3	A5
C232	A5	C739	B7	C871	D6	L208	C3	PIN542396275	F4	PIN542396374	E2	R140	A6	R238	C3	R336	F2	X101	B3
C233	A5	C745	D5	CN901	H2	L209	A5	PIN542396276	E4	PIN542396379	G4	R141	H4	R239	C3	R337	F2	X201	D2
C235	A5	C746	D5	D110	B1	L210	B5	PIN542396277	F4	PIN542396380	F3	R142	H4	R240	C3	R345	E2		
C236	A5	C747	C6	D111	B1	L211	A6	PIN542396278	F4	PIN542396381	F3	R143	B6	R241	C3	R346	E3		
C237	A5	C748	C7	D112	B1	L303	F2	PIN542396279	A3	PIN542396382	F3	R144	B6	R242	C3	R711	G4		
C299	D2	C749	C7	D113	B1	L304	F2	PIN542396287	A2	PIN542396383	F3	R145	A3	R250	A5	R712	G4		
C301	G2	C750	C4	D114	B1	L305	F1	PIN542396288	A2	PIN542396385	C4	R146	B3	R251	A5	R713	G4		

MEMO

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SECTION 4 MECHANISM OF VCR PART

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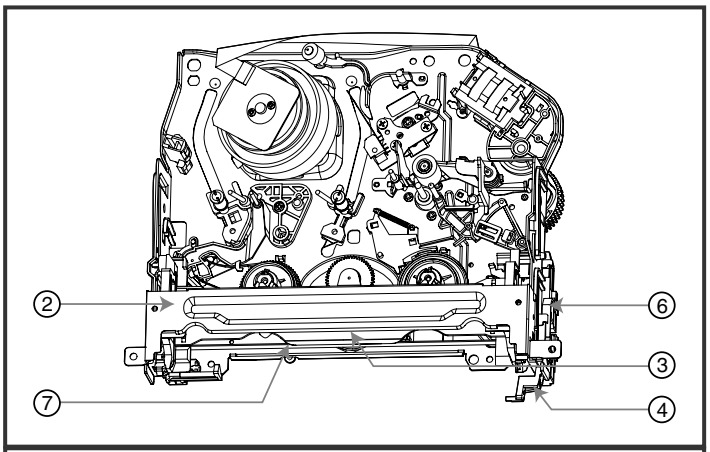
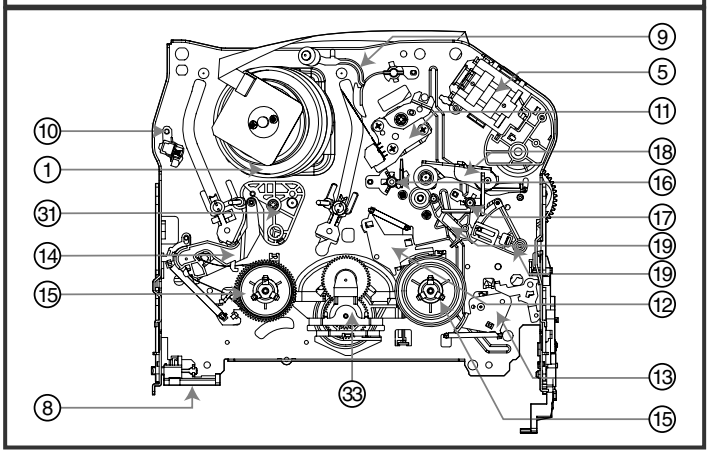
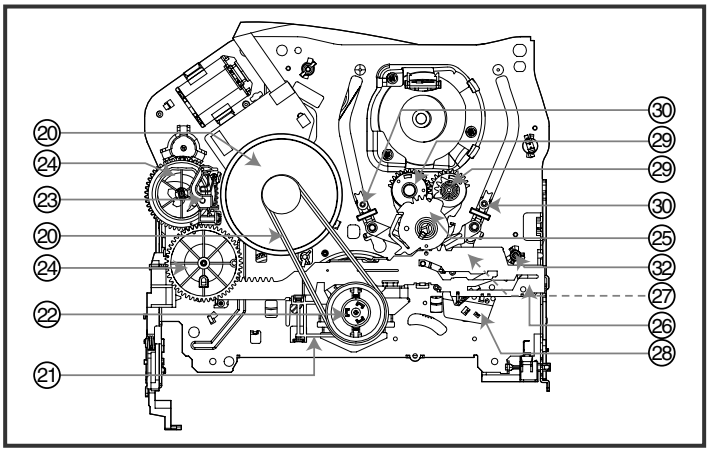
DECK MECHANISM PARTS LOCATIONS

• Top View





• Bottom View



Starting No. \ Procedure		Part	Fixing Type	Figure	
	1	Drum Assembly	3 Screw	A-1	T
	2	Plate Assembly Top	2 Hook	A-2	T
2	3	Holder Assembly CST	Chassis Hole	A-2	T
2	4	Opener Door	Chassis Hole	A-2	T
	5	Bracket Assembly L/D Motor	3 Hook	A-2	T
2,3,4	6	Gear Assembly Rack F/L	1 Hook, Chassis Hole	A-2	T
2,3,4,6	7	Arm Assembly F/L	Chassis Hole	A-2	T
	8	Lever Assembly S/W	1 Hook	A-2	T
	9	Arm Assembly Cleaner	Chassis Embossing	A-3	T
	10	Head F/E	Chassis Embossing	A-3	T
	11	Base Assembly A/C Head	1 Screw	A-3	T
2,3	12	Brake Assembly RS	1 Hook	A-4	T
2,3	13	Brake Assembly T	1 Hook	A-4	T
2,3	14	Arm Assembly Tension	2 Hook	A-4	T
2,3,12,13, 14	15	Reel S/Reel T		A-4	T
	16	Base Assembly P4	Chassis Embossing	A-5	T
	17	Opener Lid	Chassis Embossing	A-5	T
17	18	Arm Assembly Pinch	Shaft	A-5	T
17	19	Lever T/Up / Arm T/Up	1 Hook	A-5	T
17,18	20	Belt Capstan/Motor Capstan	3 Screw	A-6	B
	21	Lever F/R	Locking Tab	A-6	B
20, 21	22	Clutch Assembly D35	Washer	A-6	B
	23	Break Assembly Capstan	Locking Tab	A-6	B
	24	Gear Drive/Gear Cam	Washer/Hook	A-7	B
	25	Gear Sector	1 Hook	A-7	B
20,21,23, 24,25	26	Plate Slider	Shaft Guide	A-7	B
20,21,23, 24,25,26	27	Lever Tension	1 Hook	A-7	B
2,3,14,20, 21,25,23, 24,26	28	Lever Spring	Locking Tab	A7	B
25	29	Gear Assembly P2/Gear Assembly P3	Boss	A-8	B
2,3,14,25, 29	30	Base Assembly P2/Base Assembly P3	Chassis Slot	A-8	B
2,3,14,25, 29	31	Base Loading	1 Screw	A-9	T
2,3,14	32	Base Tension	Chassis Embossing	A-9	B
2,3,20,21, 22	33	Arm Assembly Idler	Locking Tab	A-9	T

R: Top, B:Bottom

NOTE : When reassembly perform the procedure in the reverse order.

1) When reassembling, confirm Mechanism and Mode Switch Alignment Position (Pefer to Page 4-14)
2) When disassembling, the Parts for Starting No. Should be removed first.

DECK MECHANISM DISASSEMBLY

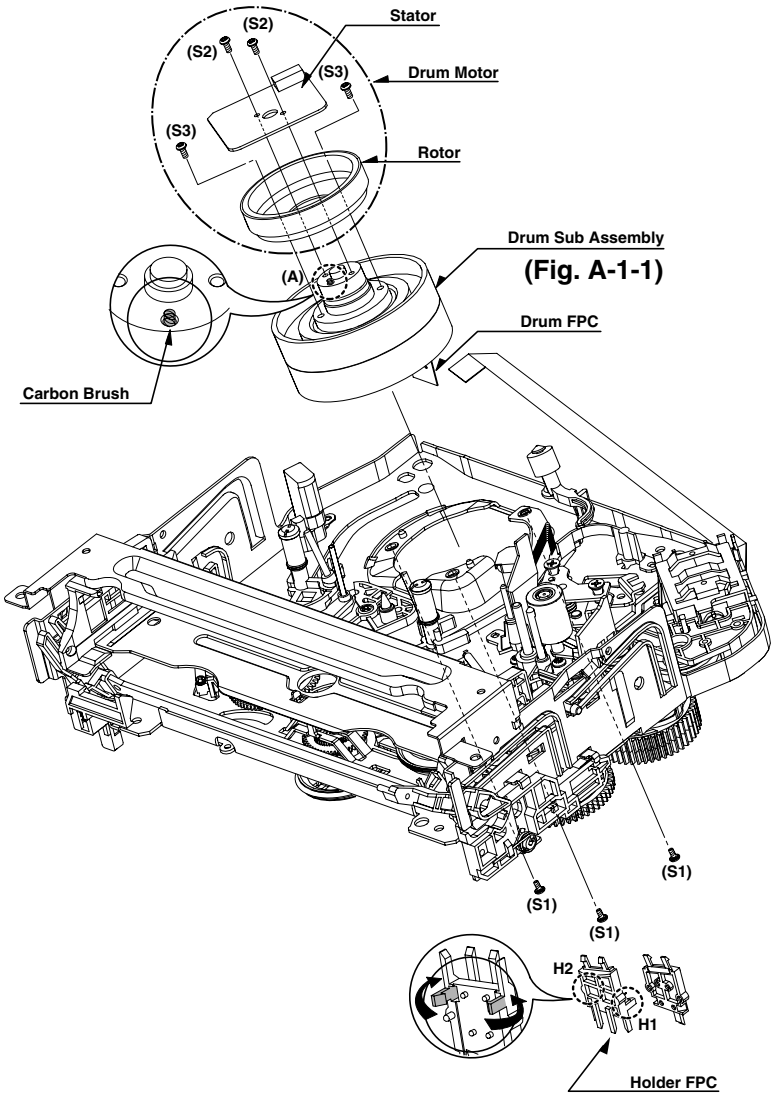


Fig. A-1

1. Drum Assembly (Fig. A-1-1)

1) Unplug the Drum FPC Connector.
2) Remove three Screws(S1) on bottom side and separate the Drum assembly.
3) Unhook (H1), (H2) and separate the Holder FPC and Cap FPC.

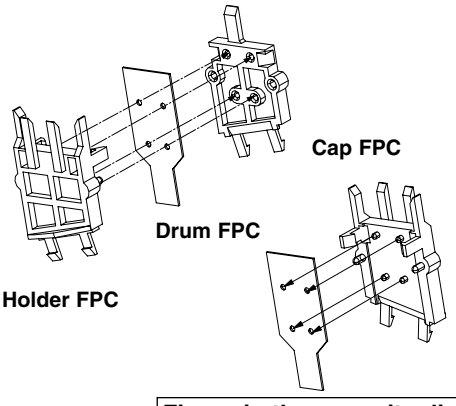
1-1. Drum Motor

1) Remove two Screws(S2) and disassemble the Stator of the Drum Motor.
(2) Remove two Screws(S3) and separate the Rotor of the

NOTE

Drum Motor from the Drum Sub assembly.
When reassembling, confirm (A) portion of the Drum Sub assembly whether the Carbon Brush is in there or not.

(Fig. B-1)



DECK MECHANISM DISASSEMBLY

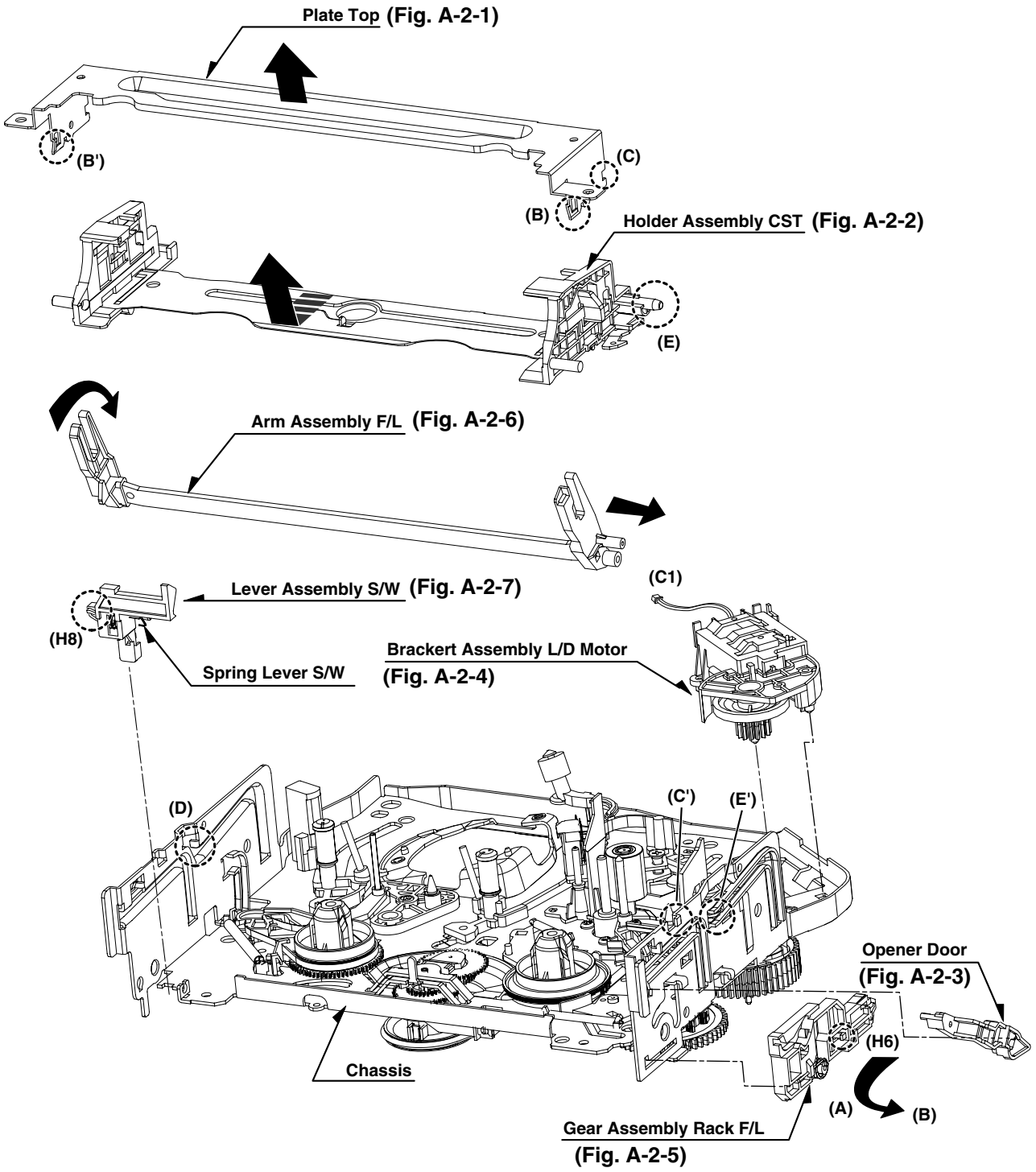


Fig. A-2

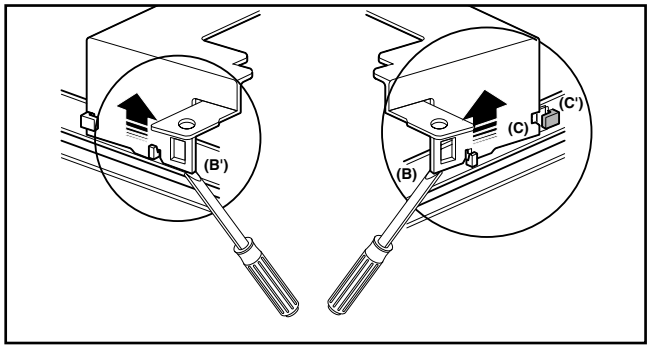
DECK MECHANISM DISASSEMBLY

2. Plate Top (Fig. A-2-1)

1) Pull the (B) portion of the Plate Top back in direction of arrow and separate the right side of it.
2) pull the (B') portion of the Plate Top back in direction of arrow and separate the left side of it.
   (Used tools : (-) type Drive, anything tool with sharp point or flat point.)

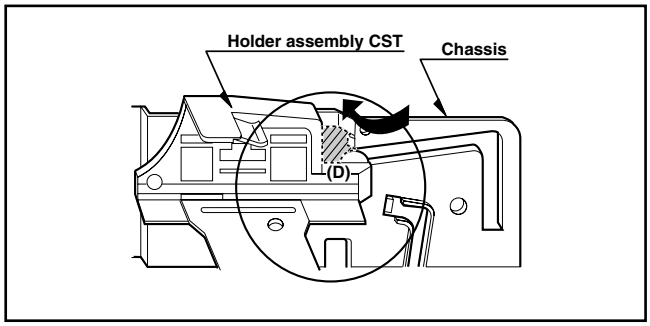
NOTE

(1) When reassembling, push the Plate Top after alignment the two position(C), (C') as Fig.



3. Holder Assembly CST (Fig.A-2-2)

1) Move the Holder assembly CST in direction of arrow and separate the left side of it first through the (D) position of the Chassis.



2) Disassemble the right side of the Holder assembly CST from each guided hole of the Chassis.

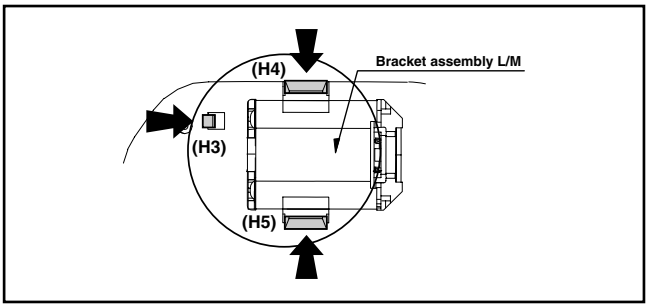
NOTE

When reassembling, insert the (E) part of the Holder assembly CST in the (E') hole of the Chassis
first and assemble the left side of it.

4. Opener Door (Fig.A-2-3)

5. Bracket assembly L/D Motor(Fig. A-2-4)

1) Unplug the Connector(C1).
2) Unhook three Hooks(H3,H4,H5) on bottom side of the Chassis, lift up the Bracket assembly L/M and disassemble the Bracket assembly L/D Motor.

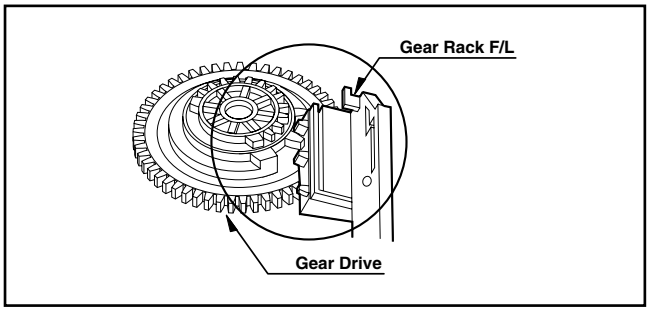


6. Gear Assembly Rack F/L (Fig. A-2-5)

1) Move the Gear Assembly Rack F/L in direction of arrow(A) and unhook the Hook(H6) pulling back in front.
2) Separate the Rear Rack F/L in direction of arrow(B).

NOTE

When reassembling, align the Gear part of the Gear Assembly Rack F/L with the Gear Drive as below Fig.

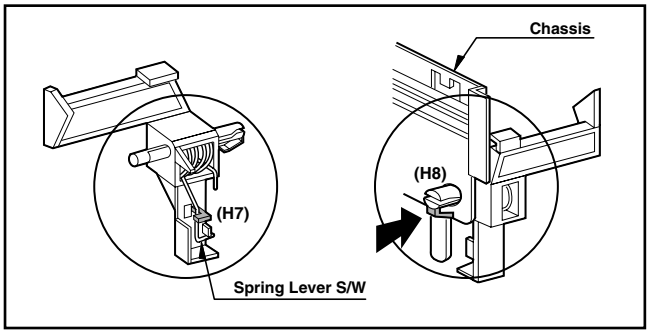


7. Arm assembly F/L (Fig. A-2-6)

1) Move the Arm assembly F/L in direction of arrow and separate the left side of it first.
2) Disassemble the Arm assembly F/L from each guided Hole of the Chassis.

8. Lever assembly S/W(Fig. A-2-7)

1) Hook the Spring Lever S/W on the Hook(H7) first as below Fig.
2) Unhook the Hook(H8) in the left side of the Chassis and move the Lever assembly S/W.



DECK MECHANISM DISASSEMBLY

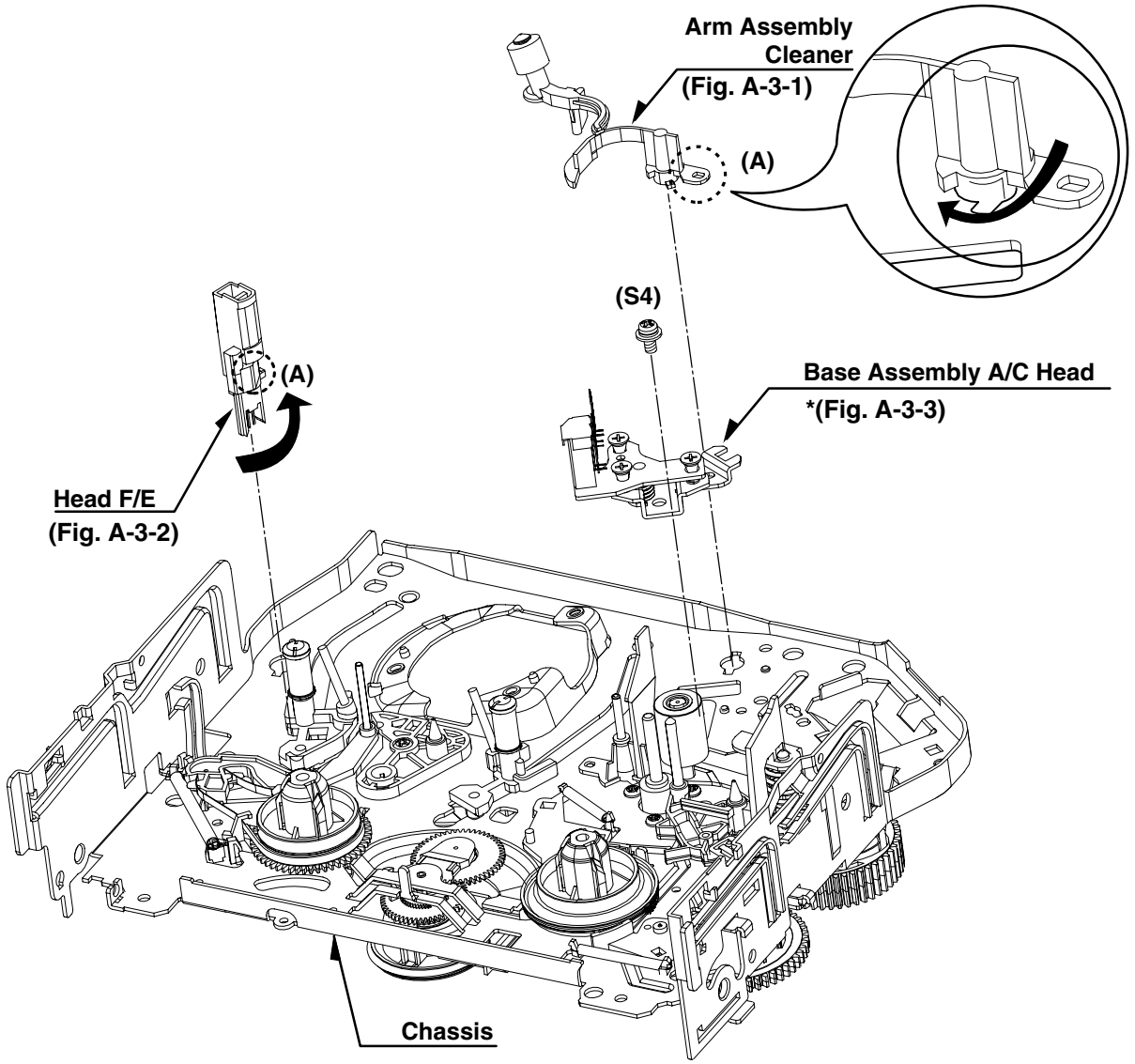


Fig. A-3

9. Arm assembly Cleaner (Fig. A-3-1)

1) Breakaway the (A) portion as Fig. A-3-1 from the Embossing of the Chassis, turn the Arm assembly Cleaner to clockwise direction and lift it up.

10. Head F/E (Fig. A-3-2)

1) Breakaway the (A) portion of the Head F/E from the Embossing of the Chassis, turn it to counterclockwise direction and lift it up.

11. Base assembly A/C Head (Fig. A-3-3)

1) Remove the Screw(S4) and lift the Base assembly A/C Head up.

DECK MECHANISM DISASSEMBLY

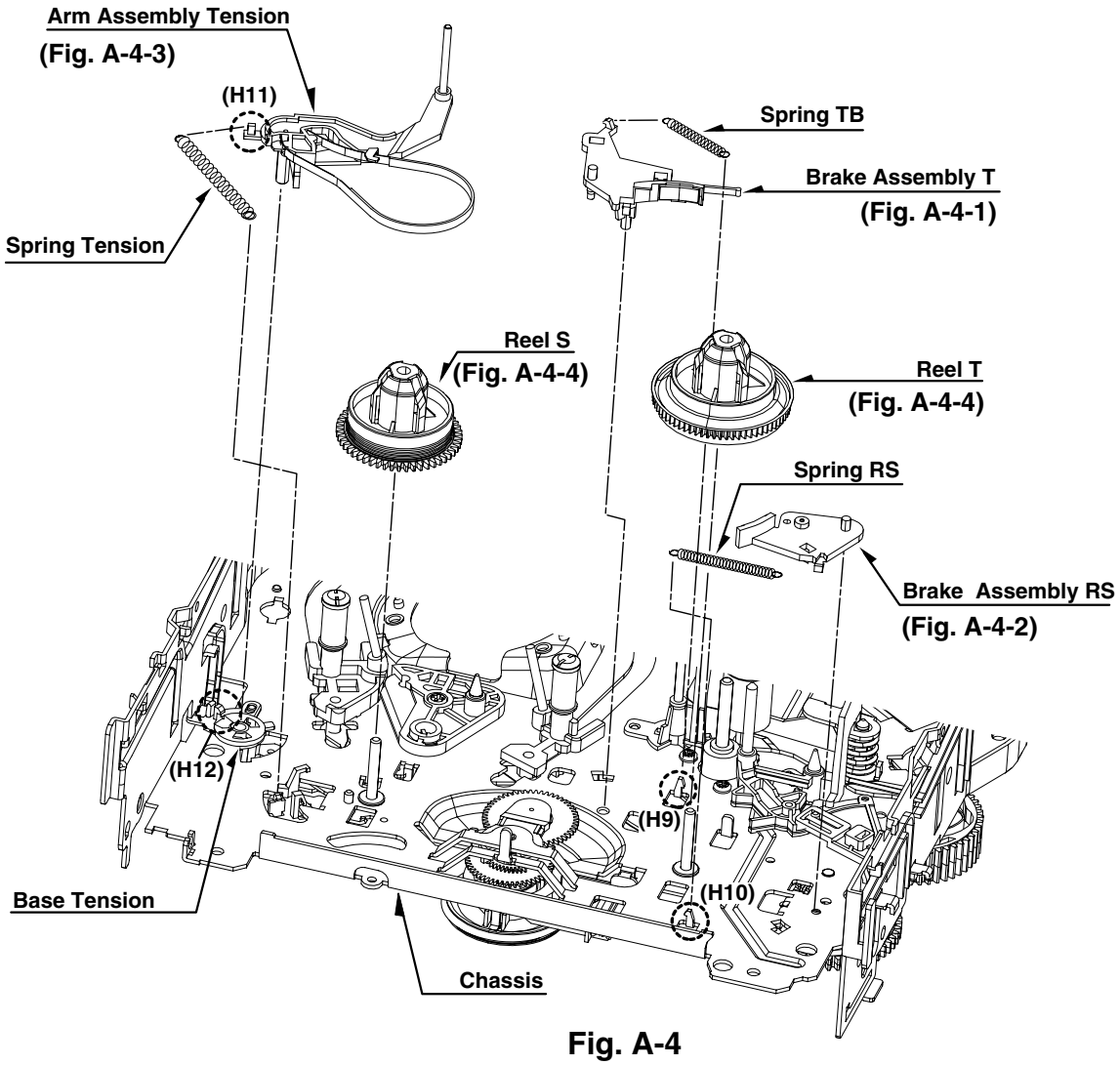


Fig. A-4

12. Brake assembly T (Fig. A-4-1)

1) Unhook the Spring TB from the Hook(H9) of the Chassis.
2) Lift the Brake assembly T up.

13. Brake assembly RS (Fig. A-4-2)

1) Unhook the Spring RS from the Hook(H10) of the Chassis..
2) Lift the Brake assembly T up.

14. Arm assembly Tension (Fig. A-4-3)

1) Unhook the Spring Tension from the Hook(H11) of the Arm assembly tension.
2) Unhook the Hook(H12) of the Base Tension and lift the Arm assembly Tension up.

NOTE

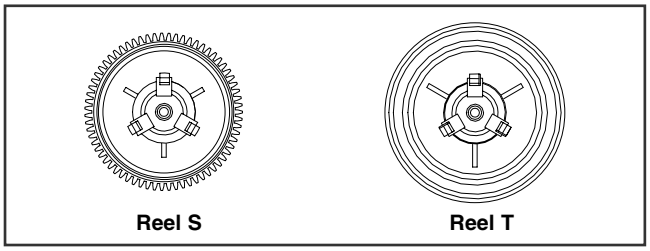
Difference for Springs

(Difference for Springs)

	Spring TB	
	Spring RS	**Color (Black)**
	Spring Tension	

15. Reel S / Reel T (Fig. A-4-4)

1) Difference for Reel S / Reel T



DECK MECHANISM DISASSEMBLY

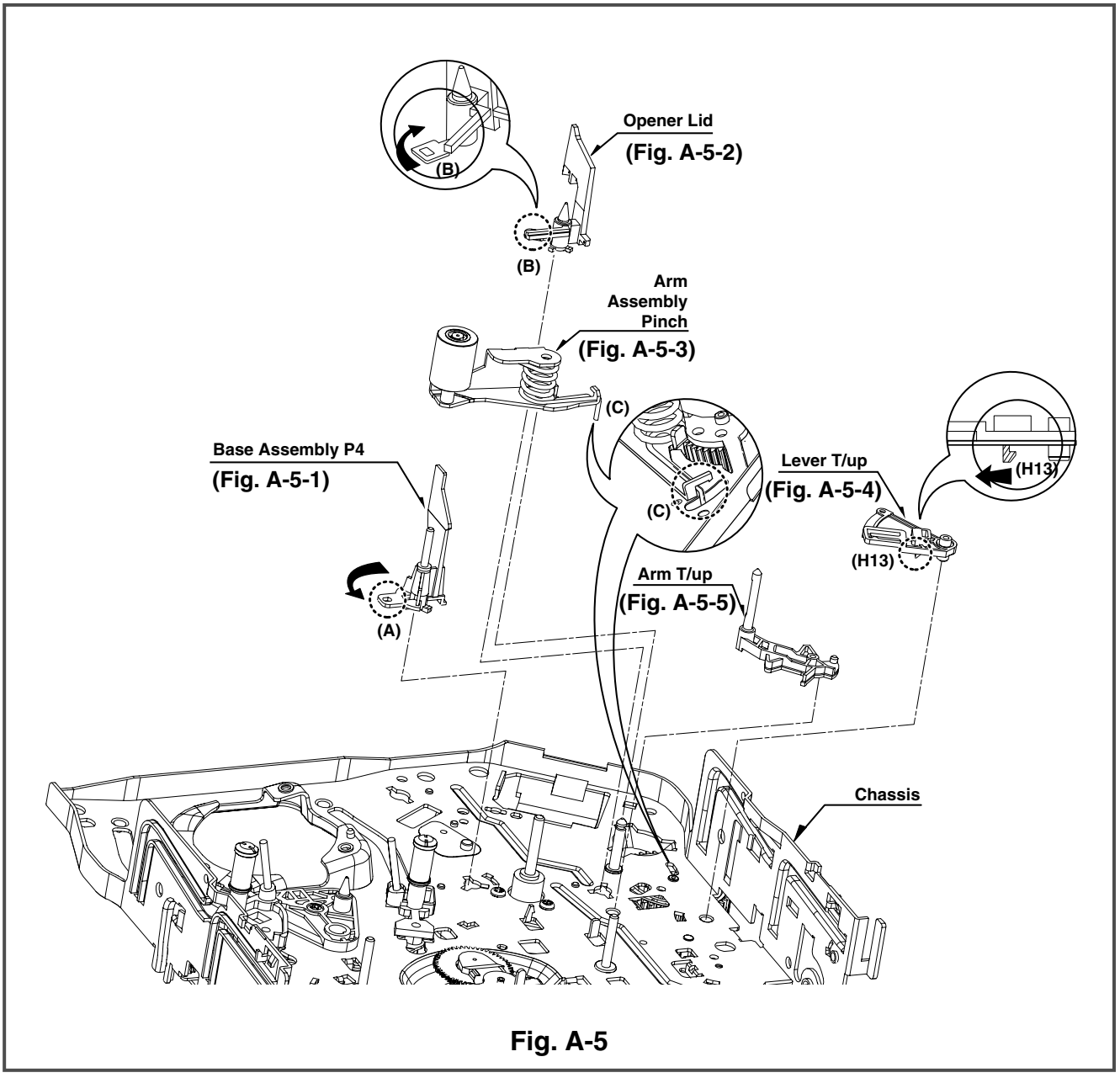


Fig. A-5

16. Base assembly P4 (Fig. A-5-1)

1) Breakaway the (A) portion of the Base assembly P4 from the Embossing of the Chassis.
2) Turn the Base assembly P4 to counterclockwise direction and lift it up.

17. Opener Lid (Fig. A-5-2)

1) Breakaway the (B) portion of the Opener Lid from the Embossing of the Chassis.
2) Turn the Opener Lid to clockwise direction and lift it up.

18. Arm assembly Pinch (Fig. A-5-3)

1) Lift the Arm assembly Pinch up.

19. Lever T/up (Fig. A-5-4)/ Arm T/up (Fig. A-5-5)

1) Unhook the Hook(H13) of the bottom Chassis and lift the Lever T/up up.
2) Lift the Arm T/up up.

NOTE

When reassembling, confirm the (C) portion of the Arm assembly Pinch is inserted to the Chassis Hole correctly as Fig.

Place the Mechanism face down, or up side down.

DECK MECHANISM DISASSEMBLY

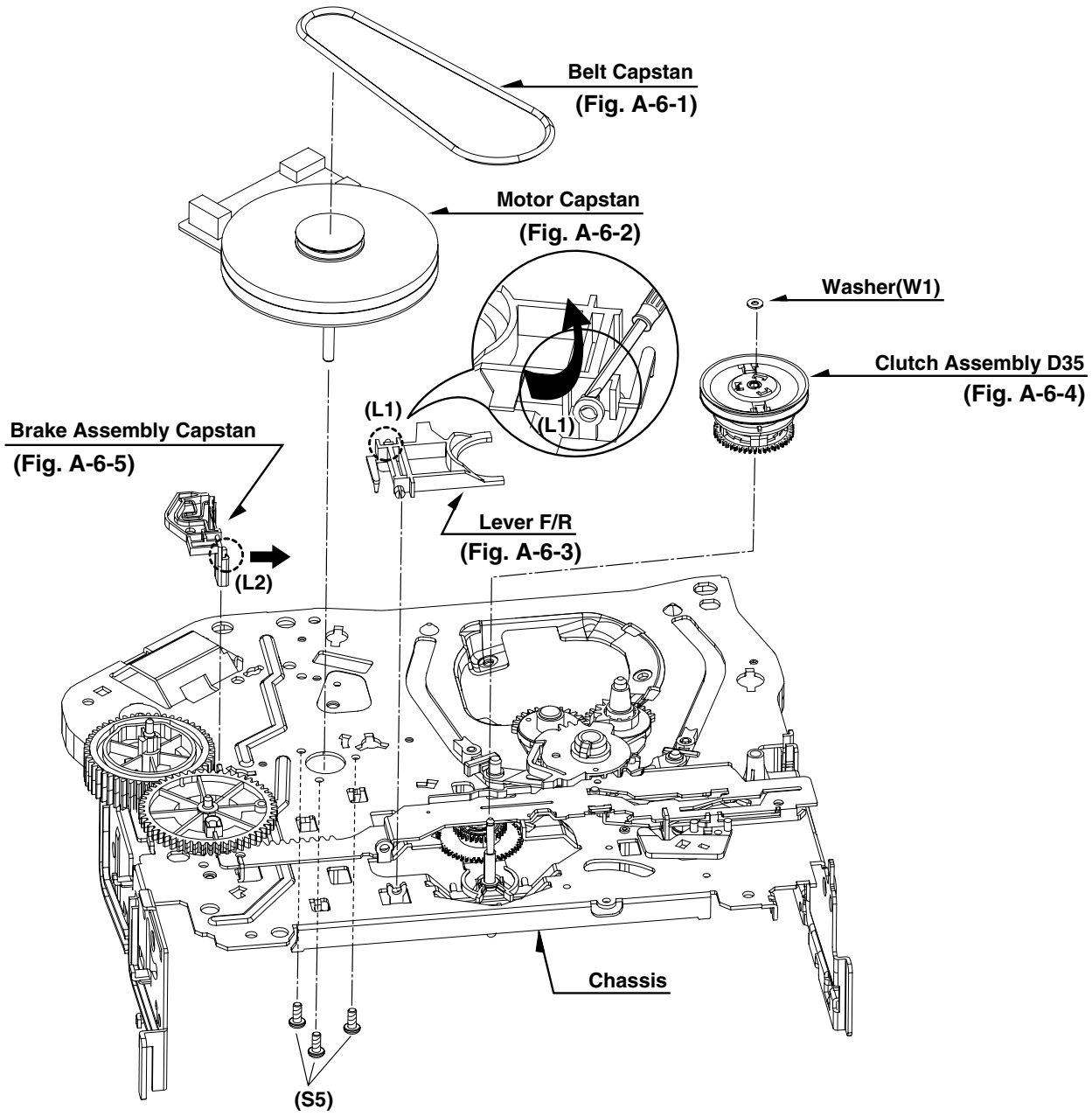


Fig. A-6

20. Belt Capstan (Fig. A-6-1)/ Motor Capstan (Fig. A-6-2)

1) Remove the Belt Capstan.
2) Remove the three Screws(S5) on bottom Chassis and lift the Motor Capstan up.

21. Lever F/R (Fig. A-6-3)

1) Unlock the Locking Tab(L1) as Fig. A-6-3 and lift the Lever F/R up.

22. Clutch assembly D35 (Fig. A-6-4)

1) Remove the Washer(W1) and lift the Clutch assembly D35 up.

23. Brake assembly Capstan (Fig. A-6-5)

1) Pull the Locking Tab(L2) back in direction of arrow and lift it up.

DECK MECHANISM DISASSEMBLY

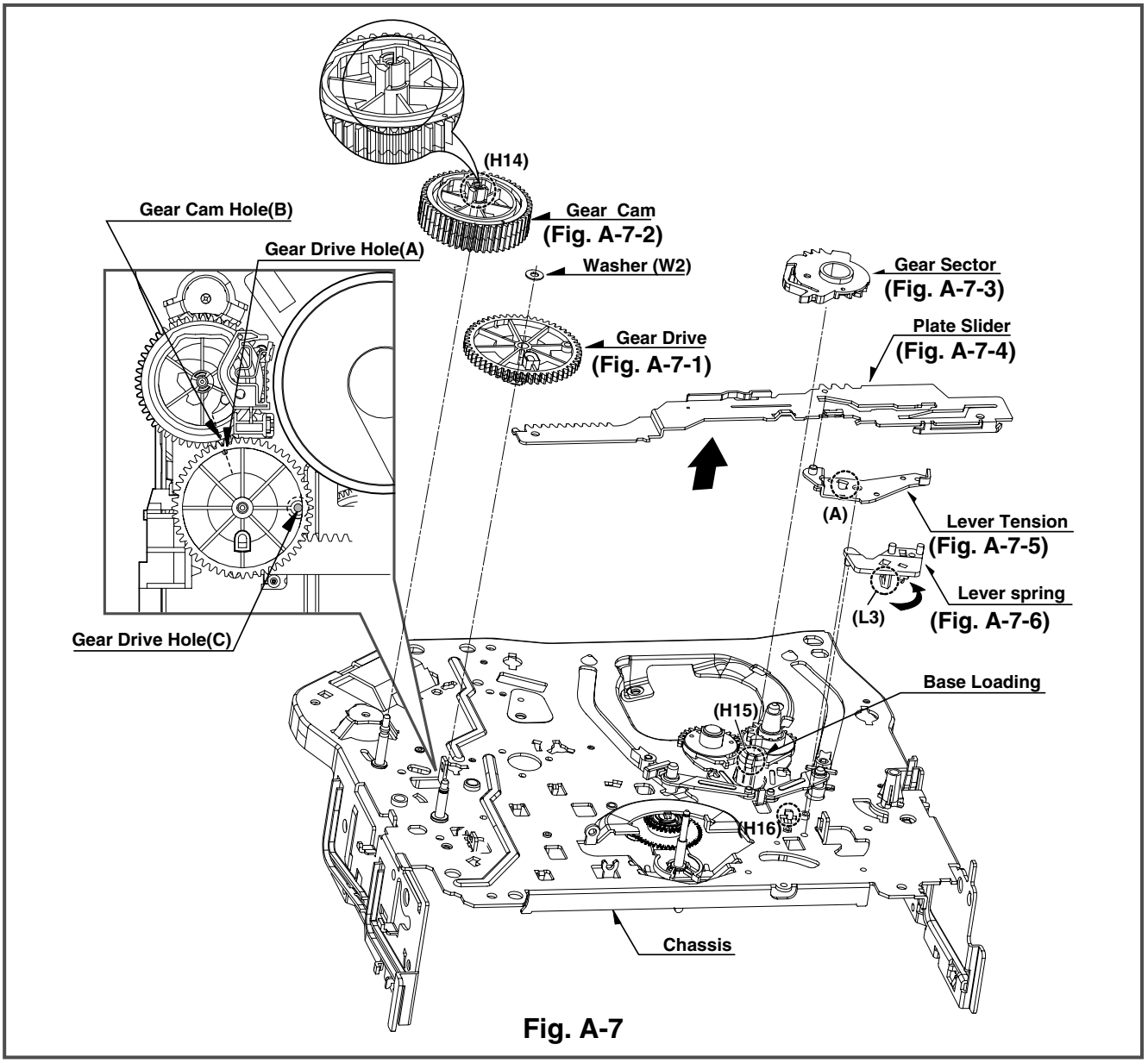


Fig. A-7

24. Gear Drive (Fig. A-7-1)/ Gear Cam (Fig. A-7-2)

1) Remove the Washer(W2) and lift the Gear Drive up.
2) Unhook the Hook(H14) of the Gear Cam and lift the Gear Cam up.

NOTE

When reassembling, align the Gear Drive Hole(A) and the Gear Cam Hole(B) in a straight line after the Gear Drive Hole(C) is aligned with the Chassis Hole as Fig.

25. Gear Sector (Fig. A-7-3)

1) Unhook the Hook(H15) of the Base Loading on bottom Chassis and lift the Gear Sector up.

26. Plate Slider (Fig. A-7-4)

1) Just lift the Plate Slider up.

27. Lever Tension (Fig. A-7-5)

1) Unhook the (A) portion of the Lever Tension from the Hook(H16) of the Chassis.
2) Turn the Lever Tension to counterclockwise direction and lift it up.

28. Lever Spring (Fig. A-7-6)

1) Unlock the Locking Tab(L3) of the bottom Chassis and lift the Lever Spring up.

DECK MECHANISM DISASSEMBLY

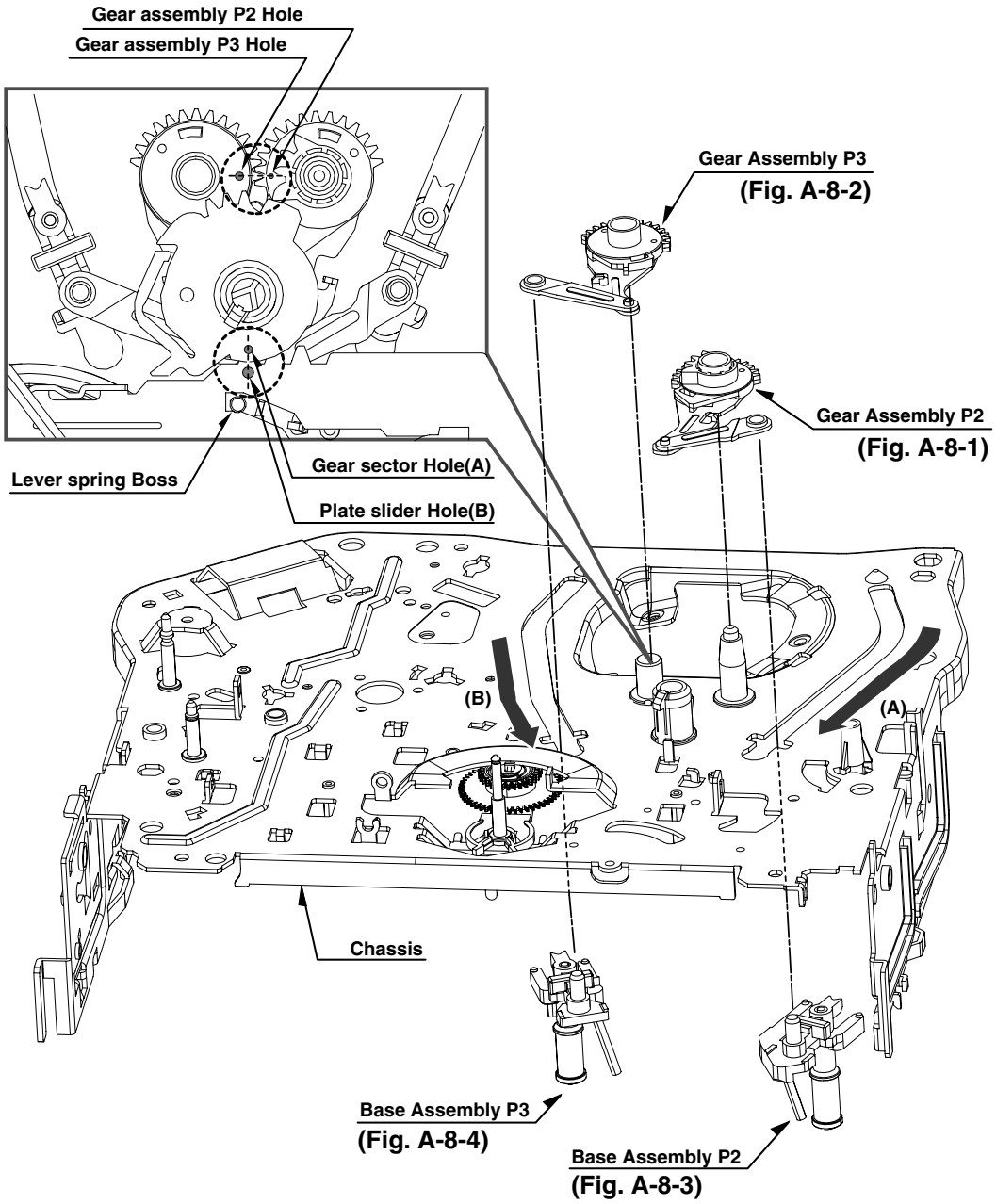


Fig. A-8

29. Gear assembly P2 (Fig. A-8-1)/ Gear assembly P3 (Fig. A-8-2)/

1) Just lift the Gear assembly P2 up.
2) Just lift the Gear assembly P3 up.

NOTE

When reassembling, align the two Holes of the Gear assembly P2 and P3 in a straight line after confirmation whether the Gear Sector Hole(A) and the Plate Slider Hole(B) are aligned or not as Fig.

30. Base assembly P2 (Fig. A-8-3)/ Base assembly P3 (Fig. A-8-4)

1) Move the Base assembly P2 in direction of arrow(A) along the Guided Hole of the Chassis and disassemble it on bottom side.
2) Move the Base assembly P3 in direction of arrow(B) along the Guided Hole of the Chassis and disassemble it on bottom side.

Place the Mechanism face down, or return to original position.

DECK MECHANISM DISASSEMBLY

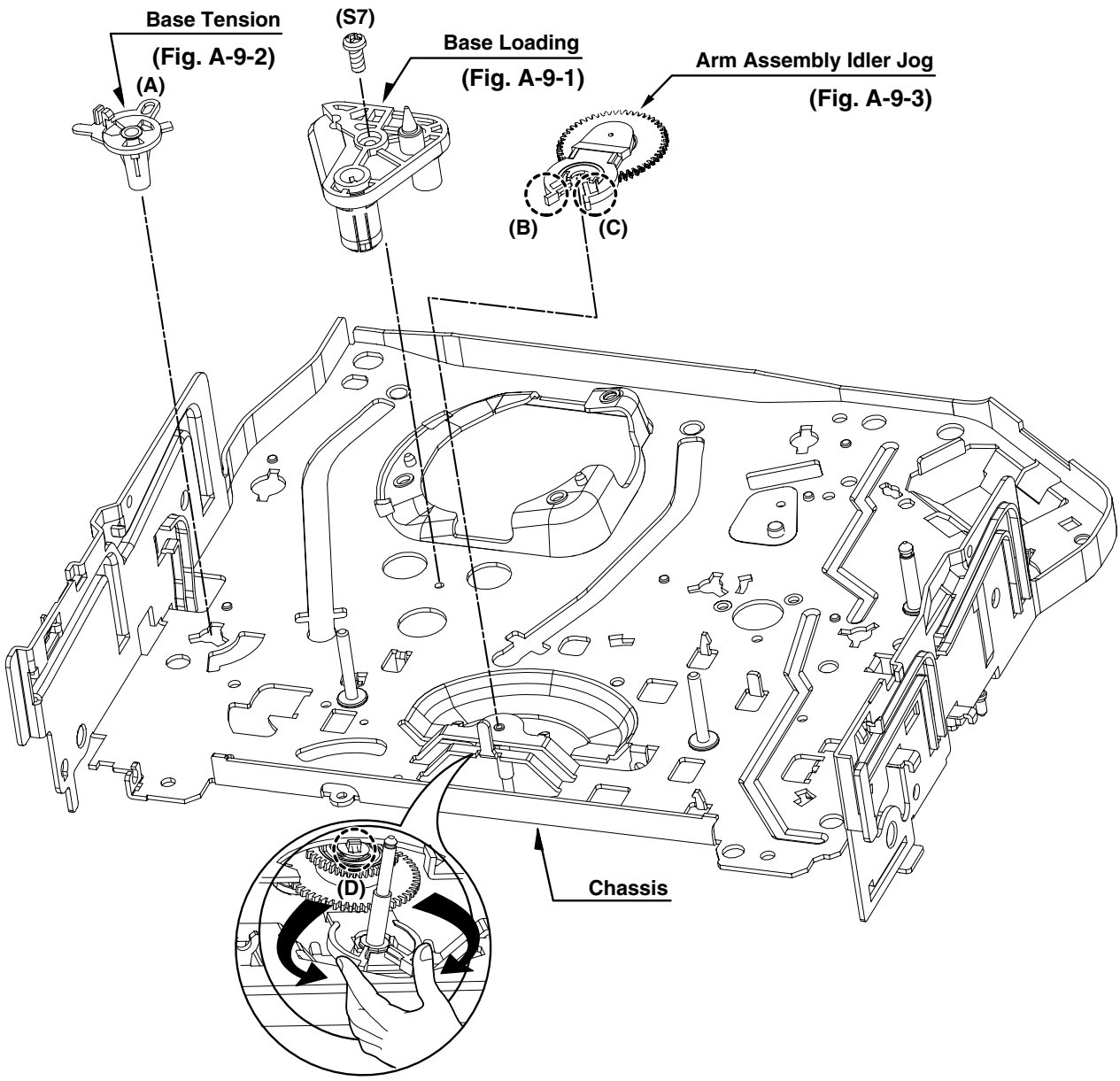


Fig. A-9

31. Base Loading (Fig. A-9-1)

1) Remove the Screw(S7).
2) Lift the Base Loading up.

32. Base Tension (Fig. A-9-2)

1) Breakaway the (A) portion of the Base Tension from the Embossing of the Chassis.
2) Turn the Base Tension to counterclockwise direction and lift it up.

33. Arm assembly Idler Jog(Fig. A-9-3)

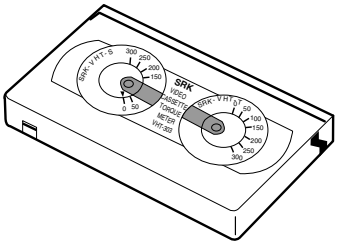
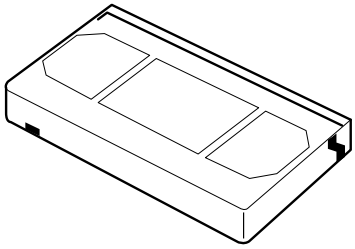
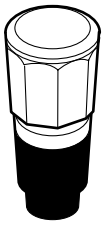
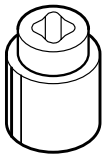
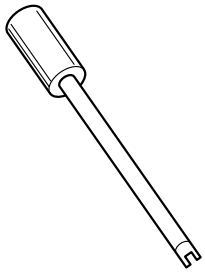
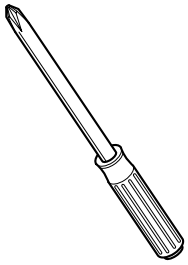
1) Make narrower the two parts, (A) and (B), as Fig. A-9-3.
2) Lift the Arm assembly Idler up.

NOTE

When disassembling, be careful not to be caught the (D) part by the Chassis as Fig.

DECK MECHANISM DISASSEMBLY

• Tools and Fixfures for Service

1. Cassette Torque meter **SRK-VHT-303(Not SVC part)** **Parts No: D00-D006** 	**2. Alignment tape** **Parts No NTSC: DTN-001** **PAL:DTN-0002** 	**3. Torque gauge** **600g.Cm ATG** **Parts No:D00-D002** 
4. Torque gauge adaptor **Parts No:D09-R001** 	**5. Post height adjusting driver** **Parts No:DTL-0005** 	**6. + Type driver (ø 5)** 

DECK MECHANISM ADJUSTMENT

1.Mechanism Alignment Position Check

Purpose:To determine if the Mechanism is in the correct position, when a Tape is ejected.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Check Point
• Blank tape	• Eject Mode (with Cassette ejected)	• Mechanism and Mode Switch Position

1) Turn the Power S/W on and eject the Cassette by pressing the Eject Button.
2) Remove the Top Cover and Plate Assembly Top, visually check if the Gear Cam Hole is aligned with the Chassis Hole as below Fig. C-2.
3) IF not, rotate the Shaft of the Loading Motor to either Clockwise or Counterclockwise until the Alignment is as below Fig. C-2.
4) Remove the Screw which fixes the Deck Mechanism and Main Frame and confirm if the Gear Cam is aligned with the Gear Drive as below Fig. C-1(A).
5) Confirm if the Mode S/W on the Main P.C.Board is aligned as below Fig. C-1(B).
6) Remount the Deck Mechanism on the Main P.C.Board and check each operation.

CHECK DIAGRAM

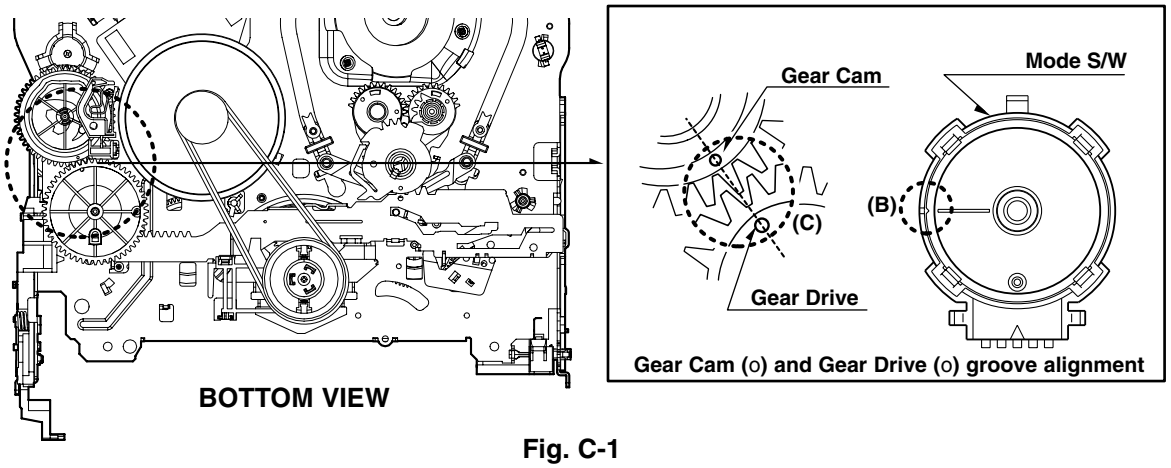


Fig. C-1

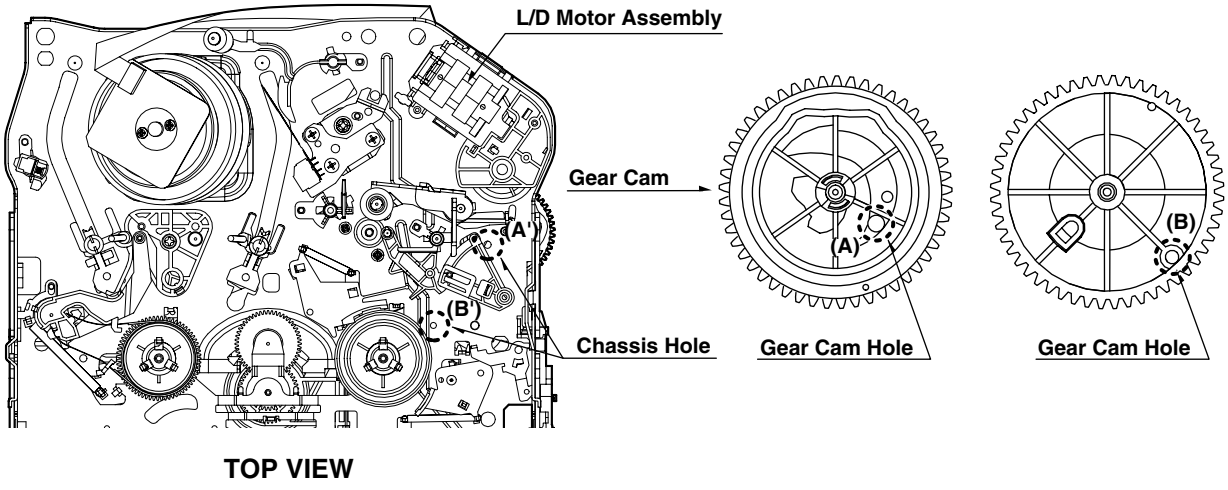


Fig. C-2

DECK MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set the Deck Mechanism to the Loading state without inserting a Cassette Tape).

1) Unplug the Power Cord from the AC Outlet.
2) Disassemble the Top Cover and Plate Assembly Top.
3) Plug the Power Cord into the AC Outlet.
4) Turn the Power S/W on and push the Lever Stopper of the Holder Assembly CST to the back for Loading the Cassette without Tape.
   Cover the Holes of the End Sensors at the both sides of the Bracket Side(L) and Bracket Assembly Door to prevent a light leak.
   Then The Deck Mechanism drives to the Stop Mode.
   In this case, The Deck Mechanism can accept inputs of each mode, however the Rewind and Review Operation can not be performed for more than a few seconds because the Take-up Reel Table is in the Stop State and can not be detected the Reel Pulses.

3. Checking Torque

Purpose: To insure smooth Transport of the Tape during each Mode of Operation.
If the Tape Transport is abnormal, then check the Torque as indicated by the chart below.

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Checking Method
• Torque Gauge(600g/cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter SRK-VHT-303	• Play (FF) or Review (REW) Mode	• Perform each Deck Mechanism Mode without inserting a Cassette Tape(Refer to above No.2 Preparation for Adjustment). • Read the Measurement of the Take-up or Supply Reels on the Cassette Torque Meter(Fig. C-3-2). • Attach the Torque Gauge Adaptor to the Torque Gauge and then read the Value of it(Fig. C-3-1).

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 400g/cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 400g/cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	40~100g/cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	120~210g/cm

NOTE:

The Values are measured by using a Torque Gauge and Torque Gauge Adaptor with the Torque Gauge affixed.

• Cassette Torque Meter (SRK-VHT-303)

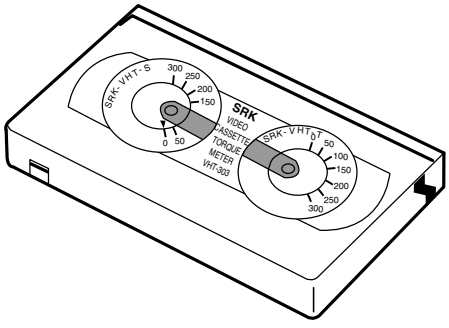


Fig. C-3-2

NOTE:

The Torque reading to measure occurs when the Tape abruptly changes direction from Fast Forward of Rewind Mode, when quick bracking is applied to both Reels.

• Torque Gauge (600g.cm ATG)

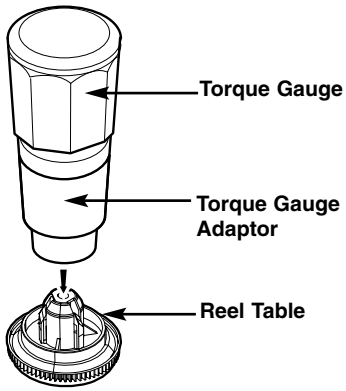


Fig. C-3-1

DECK MECHANISM ADJUSTMENT

4.Guide Roller Height Adjustment

Purpose: To regulate the Height of the Tape so that the Bottom of the Tape runs along the Tape Guide Line on the Lower Drum.

4-1. Preliminary Adjustment

Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Post Height Adjusting Driver	• Play or Review Mode	• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure

1) Confirm if the Tape runs along the Tape Guide Line of the Lower Drum.
2) If the Tape runs the Bottom of the Guide Line, turn the Guide Roller Height Adjustment Screw to Clockwise direction.
3) If it runs the Top, turn to Counterclockwise direction.
4) Adjust the Height of the Guide Roller to be guided to the Guide Line of the Lower Drum from the Starting and Ending Point of the Drum.

ADJUSTMENT DIAGRAM

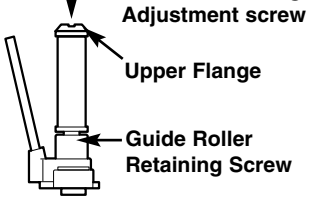


Fig. C-4-1

4-2. Precise Adjustment

Test Equipment/Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Point
• Oscilloscope • Alignment Tape • Post Height Adjusting Driver	• CH-1:PB RF Envelope • CH-2:NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Point • RF Envelope Output Point	• Play an Alignment Tape	• Guide Roller Height Adjustment Screws

Adjustment Procedure

1) Play an Alignment Tape after connecting the Probe of the Oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
2) Tracking Control(in PB Mode) : Center Position(When this Adjustment is performed after the Drum Assembly has been replaced, set the Tracking Control so that the RF Output is Maximum).
3) Height Adjustment Screw : Flatten the RF Waveform. (Fig. C-4-2)
4) Turn(Move) the Tracking Control(in PB Mode) Clockwise and Counterclockwise.(Fig. C-4-3)
5) Check that any Drop of RF Output is uniform at the Start and End of the Waveform.

NOTE

If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

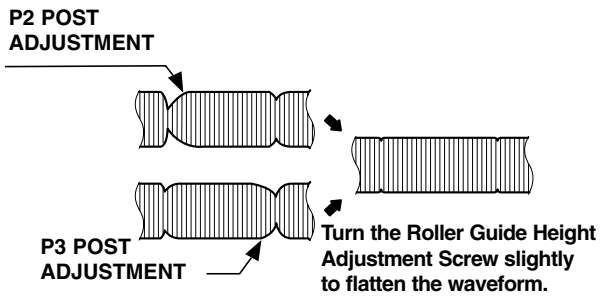


Fig. C-4-2

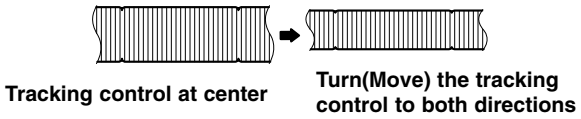
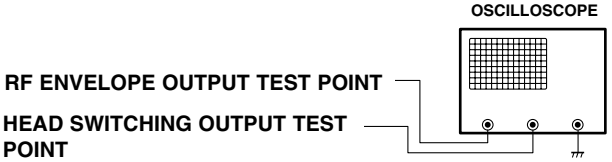


Fig. C-4-3

Connection Diagram



DECK MECHANISM ADJUSTMENT

5. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the Tape passes accurately over the Audio and Control Tracks in exact Alignment in both the Record and Playback Modes.

5-1. Preliminary Adjustment (Height and Tilt Adjustment)
Perform the Preliminary Adjustment, when there is no Audio Output Signal with the Alignment Tape.

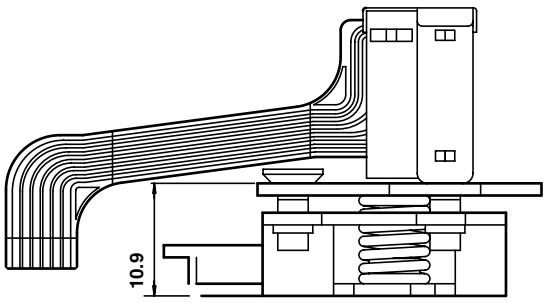
Test Equipment/ Fixture	Test Conditions (Mechanism Condition)	Adjustment Point
• Blank Tape • Screw Driver(+) Type 5mm	• Play the blank tape	• Tilt Adjustment Screw(C) • Height Adjustment Screw(B) • Azimuth Adjustment Screw(A)

Adjustment Procedure/Diagrams

1) Initially adjust the Base Assembly A/C Head as shown Fig. C-5-1 by using the Height Adjustment Screw(B).
2) Play a Blank Tape and observe if the Tape passes accurately over the A/C Head without Tape Curling or Folding.
3) If Folding or Curling is occured then adjust the Tilt Adjustment Screw(C) while the Tape is running to resemble Fig. C-5-3.
4) Reconfirm the Tape Path after Playback about 4~5 seconds.

NOTE

Ideal A/C head height occurs, when the tape runs between 0.2~0.25mm above the bottom edge of the A/C head core.



A/C Head Base

Fig. C-5-1

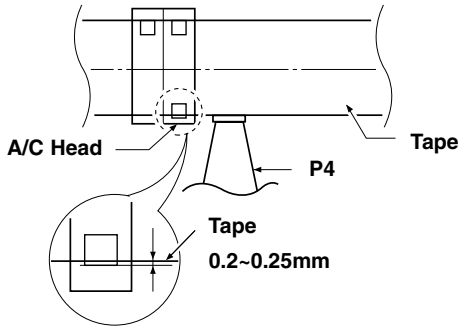
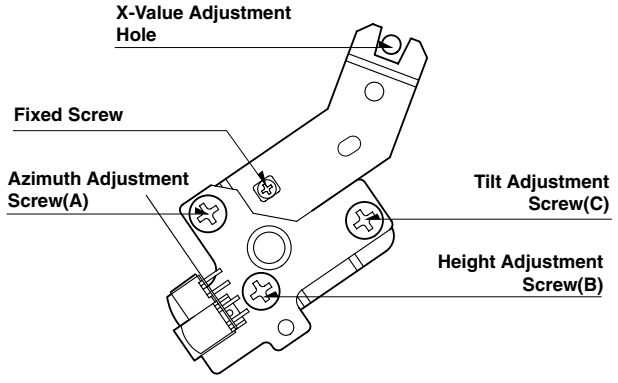


Fig. C-5-3



A/C Head Assembly

Fig. C-5-2

5-2. Confirm that the Tape passes smoothly between the Take-up Guide and Pinch Roller(using a Mirror or the naked eye).

1) After completing Step 5-1.(Preliminary Adjustment), check that the Tape passes around the Take-up Guide and Pinch Roller without Folding or Curling at the Top or Bottom.
   (1) If Folding or Curling is observed at the Bottom of the Take-up Guide then slowly turn the Tilt Adjustment Screw(C) in the Clockwise direction.
   (2) If Folding or Curling is observed at the Top of it then slowly turn the Tilt Adjustment Screw(C) in the Counterclockwise direction.

NOTE:

Check the RF Envelope after adjusting the A/C Head, if the RF Waveform differs from Fig. C-5-4, performs Precise Adjustment to flat the RF Waveform.

5-3. Precise Adjustment (Azimuth adjustment)

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment Tape(SP) • Screw Driver(+) Type 5mm	• Audio output jack	• Play an Alignment Tape 1KHz, 7KHz Sections	• Azimuth Adjustment Screw(A) • Height Adjustment Screw(B)

Adjustment Procedure

1) Connect the Probe of the Oscilloscope to Audio Output Jack.
2) Alternately adjust the Azimuth Adjustment Screw(A) and the Tilt Adjustment Screw(C) for Maximum Output of the 1Khz and 7Khz segments, while maintaining the flattest Envelope differential between the two Frequencies.

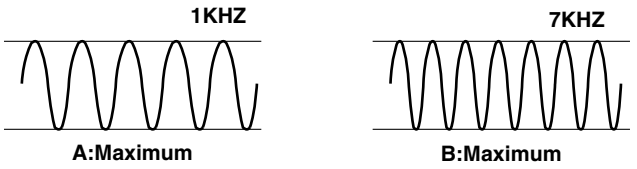
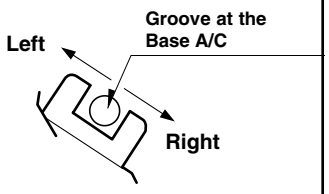


Fig. C-5-4

6. X-Value Adjustment

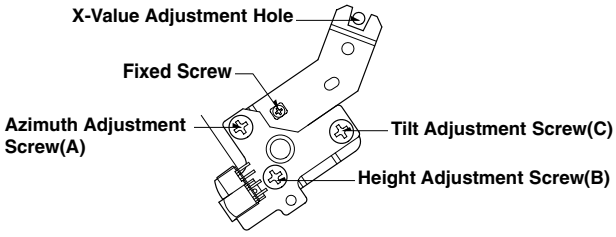
Purpose: To obtain compatibility with other VCR(VCP) Models.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Point
• Oscilloscope • Alignment tape(SP only) • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play an Alignment Tape	

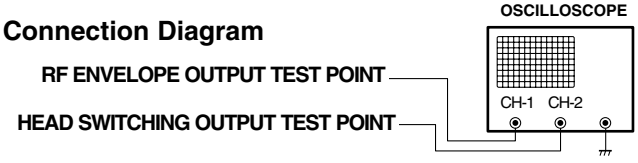
Adjustment Procedure

1) Release the Automatic Tracking to run long enough for Tracking to complete it's Cycle.
2) Loosen the Fixed Mounting Screw and move the Base Assembly A/C Head in the direction as shown in the Diagram to find the center of the peak that allows for the maximum Waveform Envelope.
   This method should allow the 31um Head to be centrally located over the 58um Tape Track.
3) Tighten the Base Assembly A/C Head mounting Screw.

Adjustment Diagram



Connection Diagram



DECK MECHANISM ADJUSTMENT

7. Adjustment after Replacing Drum Assembly (Video Heads)

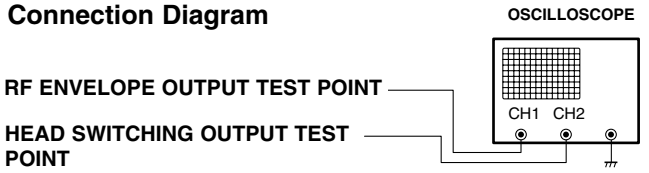
Purpose: To correct for shift in the Roller Guide and X value after replacing the Drum.

Test Equipment/ Fixture	Connection Point	Test Conditions (Mechanism Condition)	Adjustment Points
• Oscilloscope • Alignment tapes • Blank Tape • Post Height Adjusting Driver • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL: SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play the blank tape • Play an alignment tape	• Guide Roller Precise Adjustment • Switching Point • Tracking Preset • X-Value

Checking/Adjustment Procedure

Play a blank tape and check for tape curling or creasing around the roller guide. If there is a problem then follow the procedure 4. "Guide Roller Height" and 5. "Audio Control(A/C) Head Adjustment".

Connection Diagram



Waveform

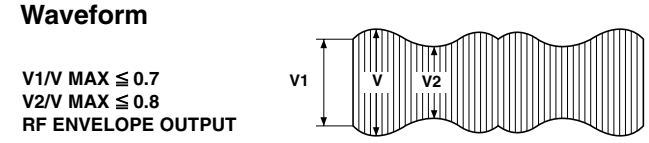


Fig. C-7

8. Check the Tape Travel after Reassembling Deck Assembly.

8-1.Checking Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment/ Fixture	Specification	Connection Points	Test Conditions (Mechanism Condition)
• Oscilloscope • Alignment tapes(with 6H 3kHz Color Bar Signal) • Stop Watch	• RF Locking Time: Less than 5 sec. • Audio Locking Time:Less than 10sec	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an alignment tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Play an alignment tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.

NOTES:

1) CUE is fast forward mode (FF)
2) REV is the rewind mode (REW)
3) Referenced to the Play mode

8-2. Checking for tape curling or jamming

Test Equipment/ Fixture	Specification	Test Conditions (Mechanism Condition)
• T-160 Tape • T-120 Tape	• Be sure there is no tape jamming or curling at the begining, middle or end of the tape.	• Run the CUE, REV play mode at the beginning and the end of the tape.

Checking Procedure

1) Confirm that the tape runs smoothly around the roller guides, drum and A/C head assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the begining, middle and end sections of the cassette.
2) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.

1 Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.
Check with the customer to find out how often the unit is used, and then determine that the unit is ready for inspection and maintenance. Check the following parts.

Phenomenon	Inspection	Replacement	
Color beats	Dirt on full-erase head	o	F/E Head
Poor S/N, no color	Dirt on video head	o	Video Head
Vertical or Horizontal jitter	Dirt on video head Dirt on tape transport system	o	
Low volume, Sound distorted	Dirt on Audio/control head	o	A/C Head
Tape does not run. Tape is slack	Dirt on pinch roller	o	Pinch Roller Belt Capston
In Review and Unloading (off mode), the Tape is rolled up loosely.	Clutch Assembly D33K Torque reduced	o	Clutch Assembly D33K
	Cleaning Drum and transport system	Fig. C-9-3	

NOTE

If locations marked with **o** do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations See the Greasing (Page 4-22) for the sections to be lubricated and greased.

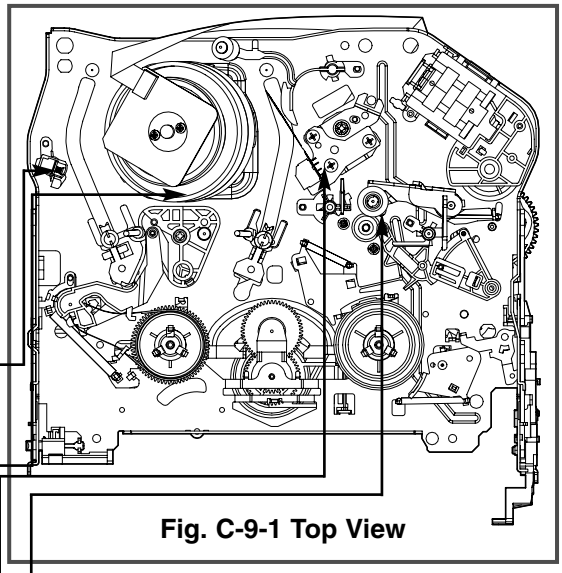


Fig. C-9-1 Top View

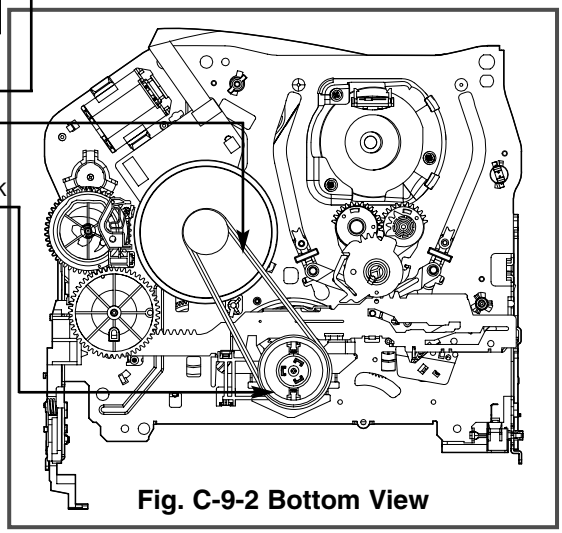


Fig. C-9-2 Bottom View

*** No. (1)~(13) Indicates the Tape Path to be traveled from Supply Reel to Take-up Reel.**

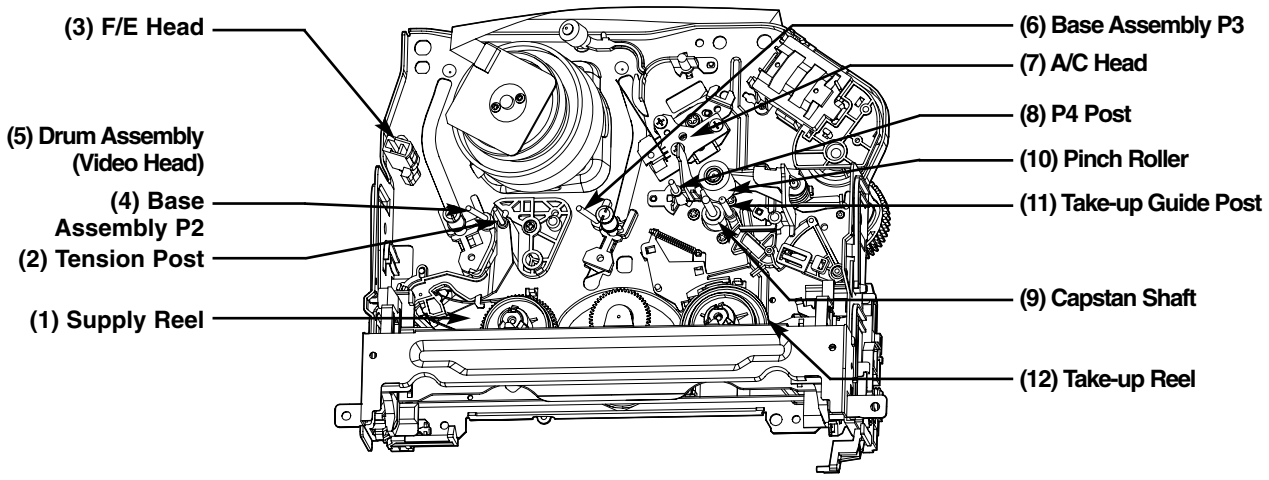


Fig. C-9-3 Tape Transport System

2. Required Maintenance

The recording density of a VCR(VCP) is much higher than that of an audio tape recorder. VCR(VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatiblity with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

3. Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR(VCP), and the environment in which the VCR(VCP) is used.
But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	■	■	■
Two hours	■	■	
Three hours	■		

4. Supplies Required for Inspection and Maintence

(1) Grease : Kanto G-311G (Blue) or equivalent
(2) Isopropyl Alcohol or equivalent
(3) Cleaning Patches
(4) Grease : Kanto G-381(Yellow)

5) Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.
(Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.)
Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isporopyl Alcohol.

NOTES:

① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no that force is that would cause deforming or damage applied to the system.

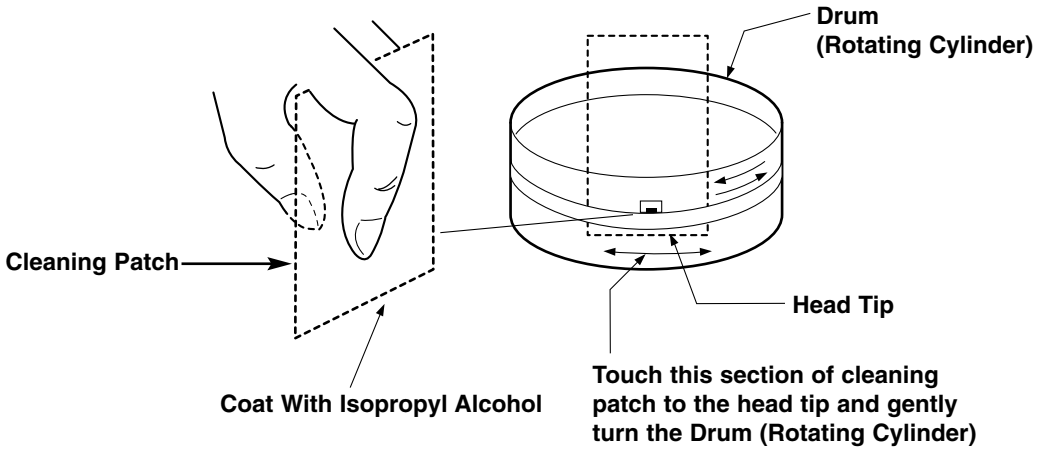

Drum
(Rotating Cylinder)
Cleaning Patch
Head Tip
Coat With Isopropyl Alcohol
Touch this section of cleaning patch to the head tip and gently turn the Drum (Rotating Cylinder)

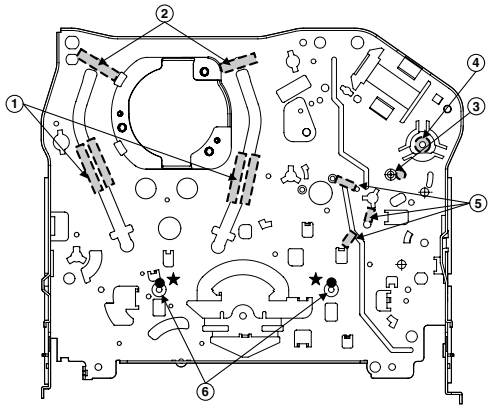
Fig. C-9-4

5-2) Greasing

(1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape transport or drive system. Wipe any excess and clean with clean ing patch wetted in Isopropyl Alcohol.

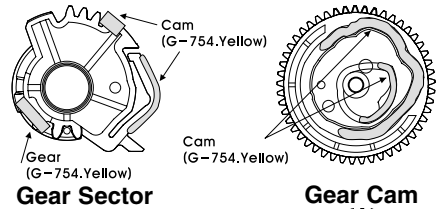
NOTE:Greasing Points

1) Loading Path Inside & Top side
2) Base Tension Boss inside Hole
3) Arm Assembly F/L "U" Groove
4) Arm Take-up Rubbing Section
5) L/D Motor Gear Wheel Part
6) Shaft
7) Arm Assembly F/L of Buming Inside Hole
8) Reel S, T Shaft (G381:Yellow)
9) Brake T Groove

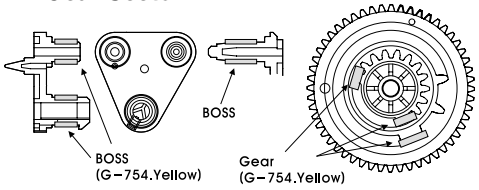


Chassis (Top)

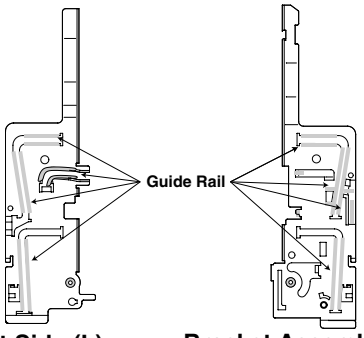
Gear Part



Gear Sector **Gear Cam**



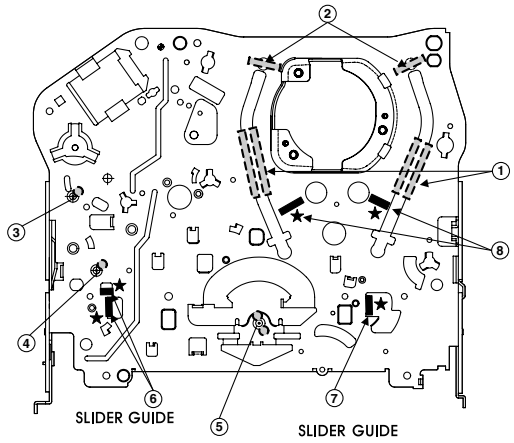
Base Loading **Gear Drive**



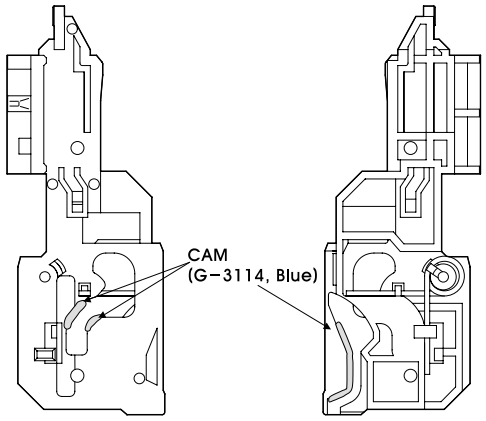
Bracket Side (L) **Bracket Assembly Door**

(2) Periodic greasing
Grease specified locations every 5,000 hours.

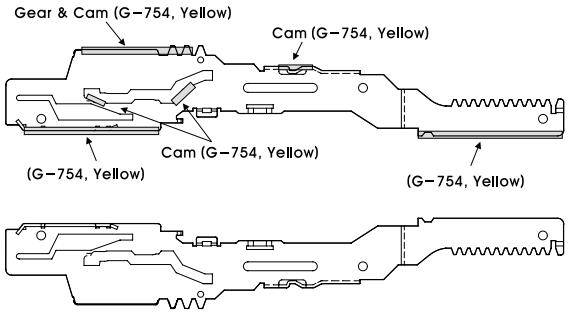
1) Loading Path Inside & Top side
2) Shaft
3) Gear Rack F/L Moving Section
4) Shaft
5) Lever Tension Groove
6) Clutch Assembly D33 Shaft
7) Brake "S" Rubbing Section



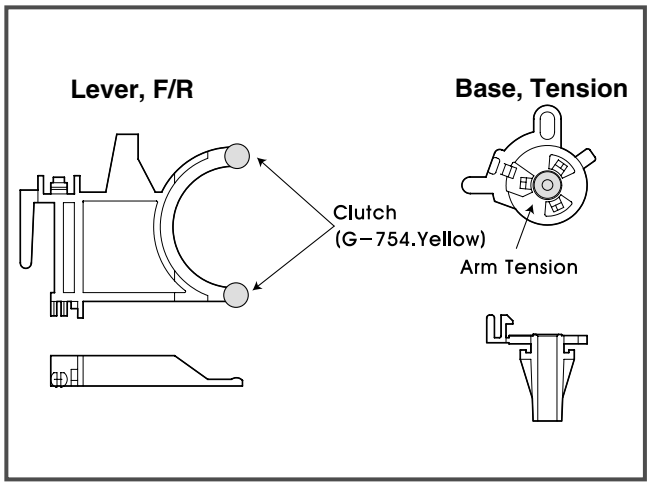
Chassis (Bottom)



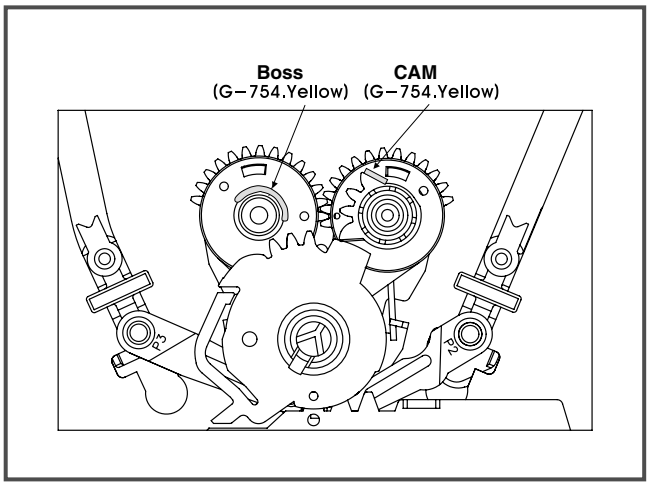
Guide Rack F/L **Gear Rack F/L**



GEAR , F/R



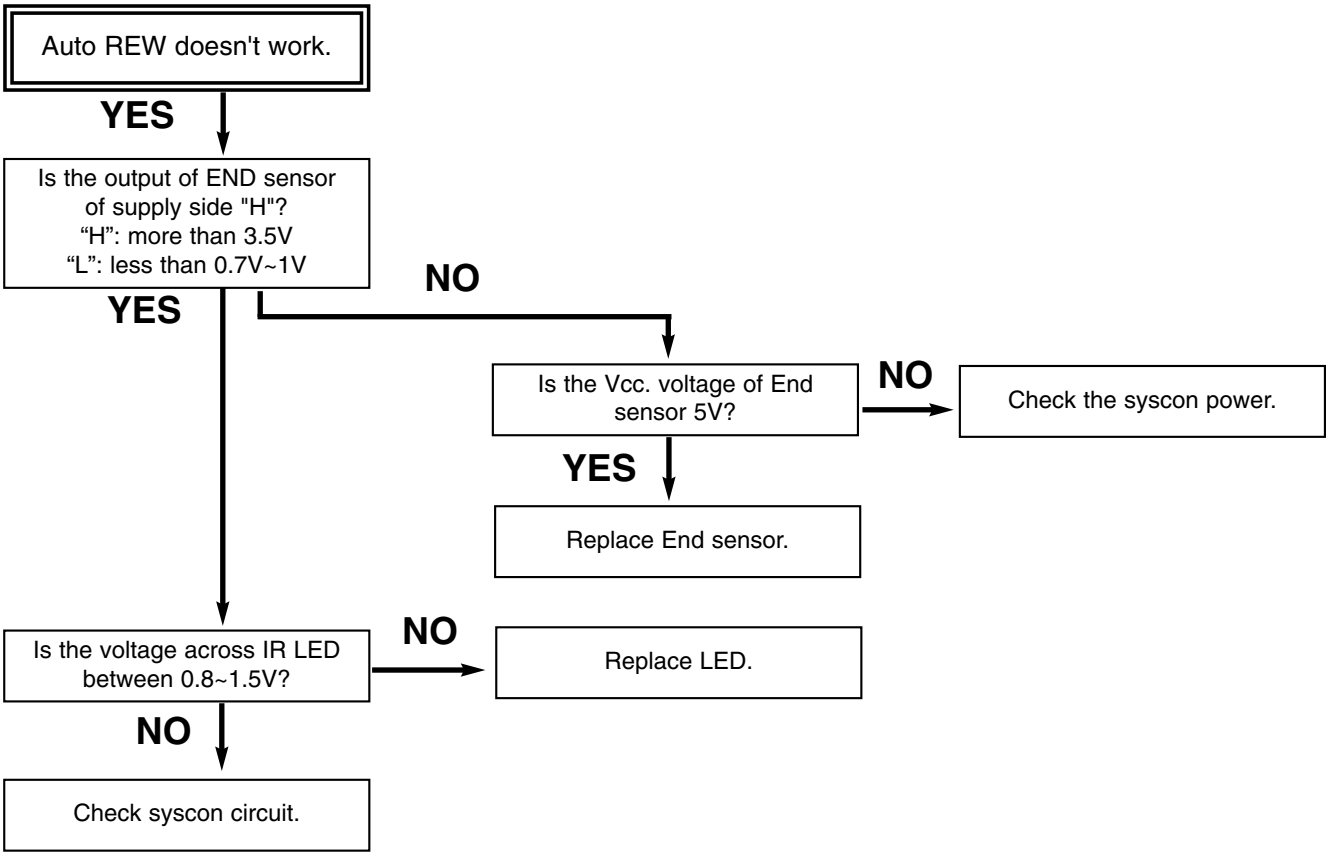
GEAR AY, P2 & P3



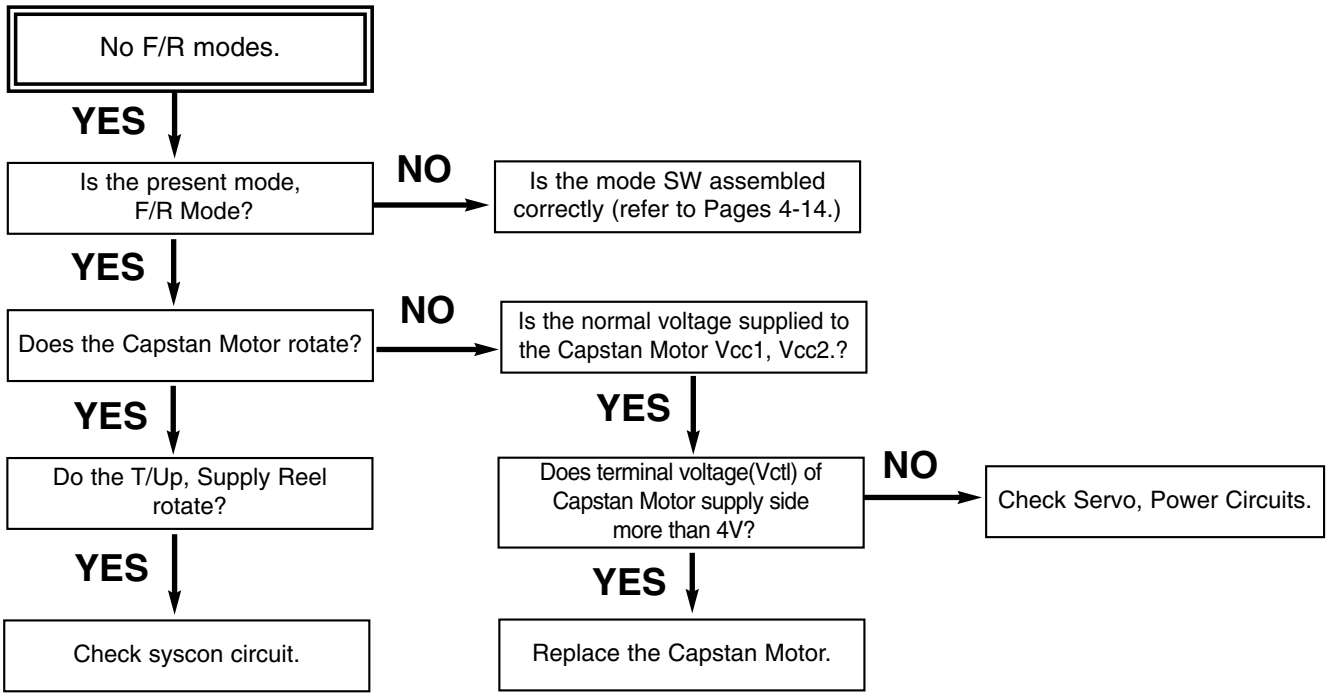
MECHANISM TROUBLESHOOTING GUIDE

1.Deck Mechanism

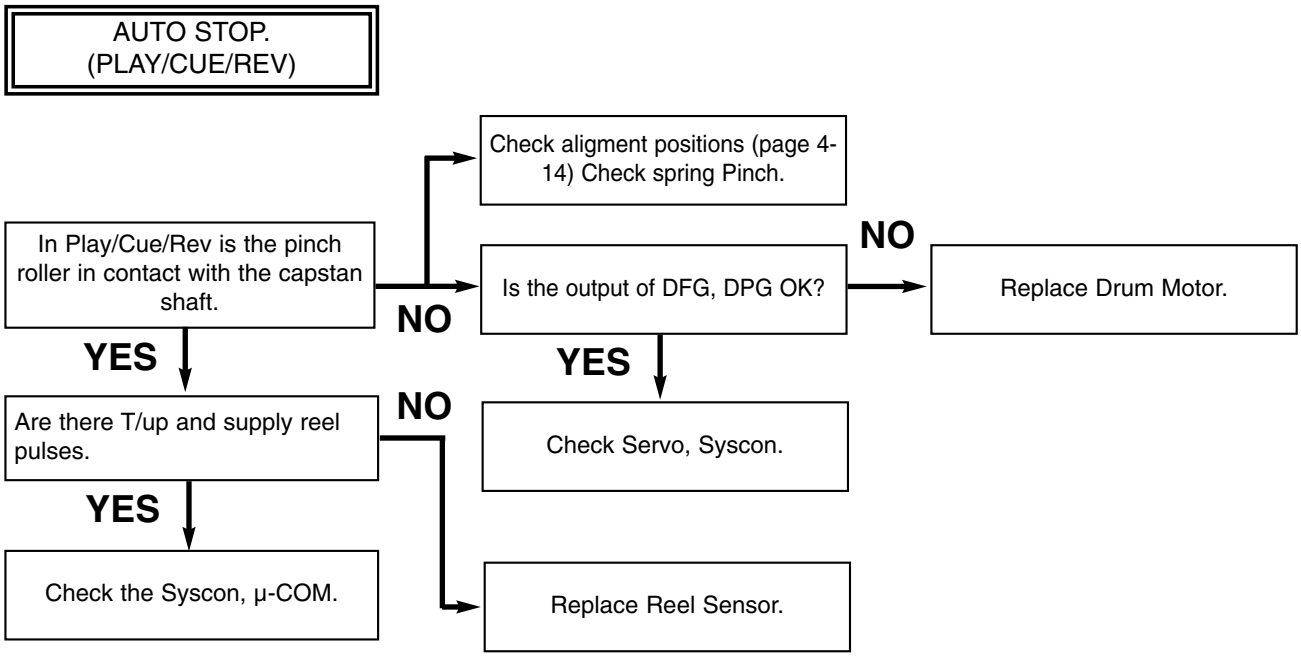
A.



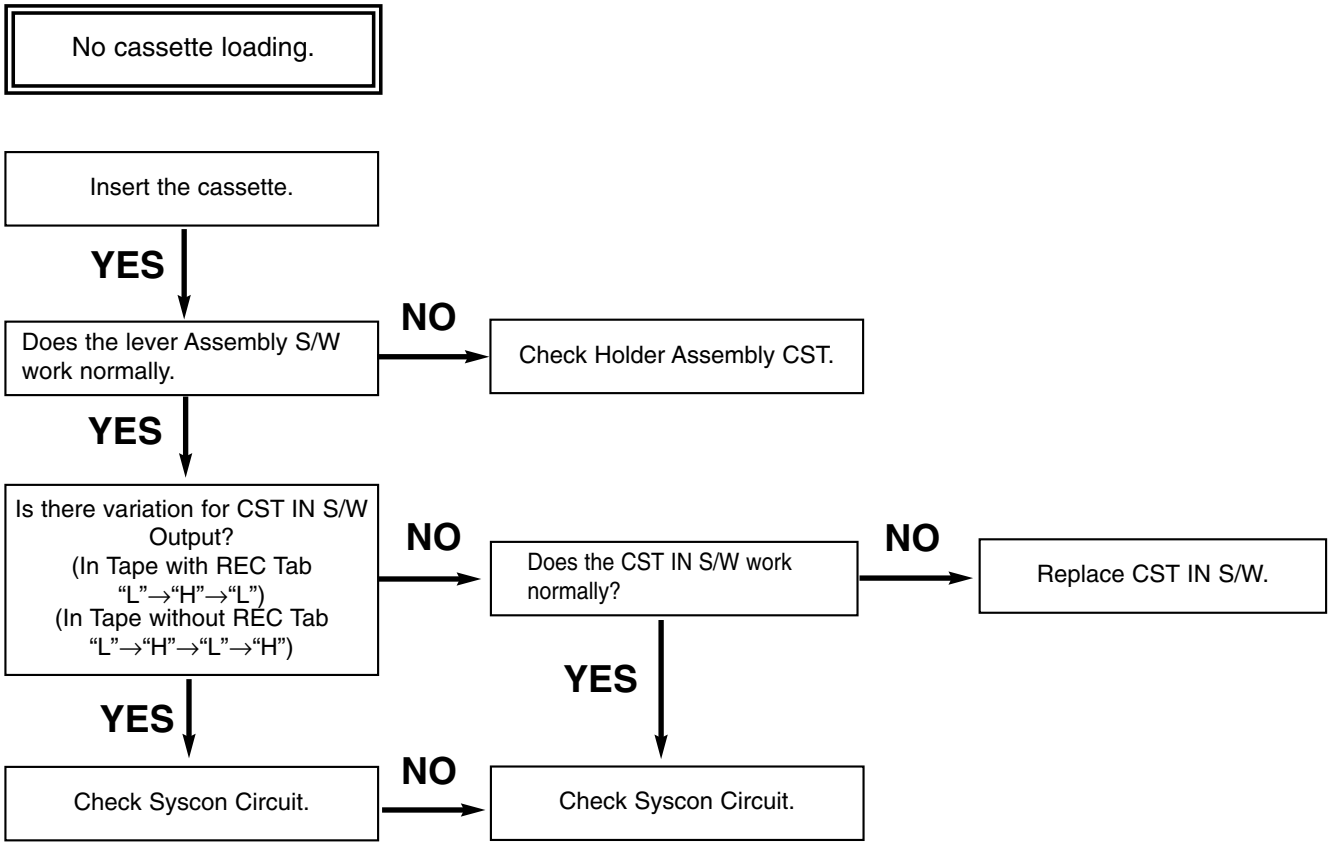
B.



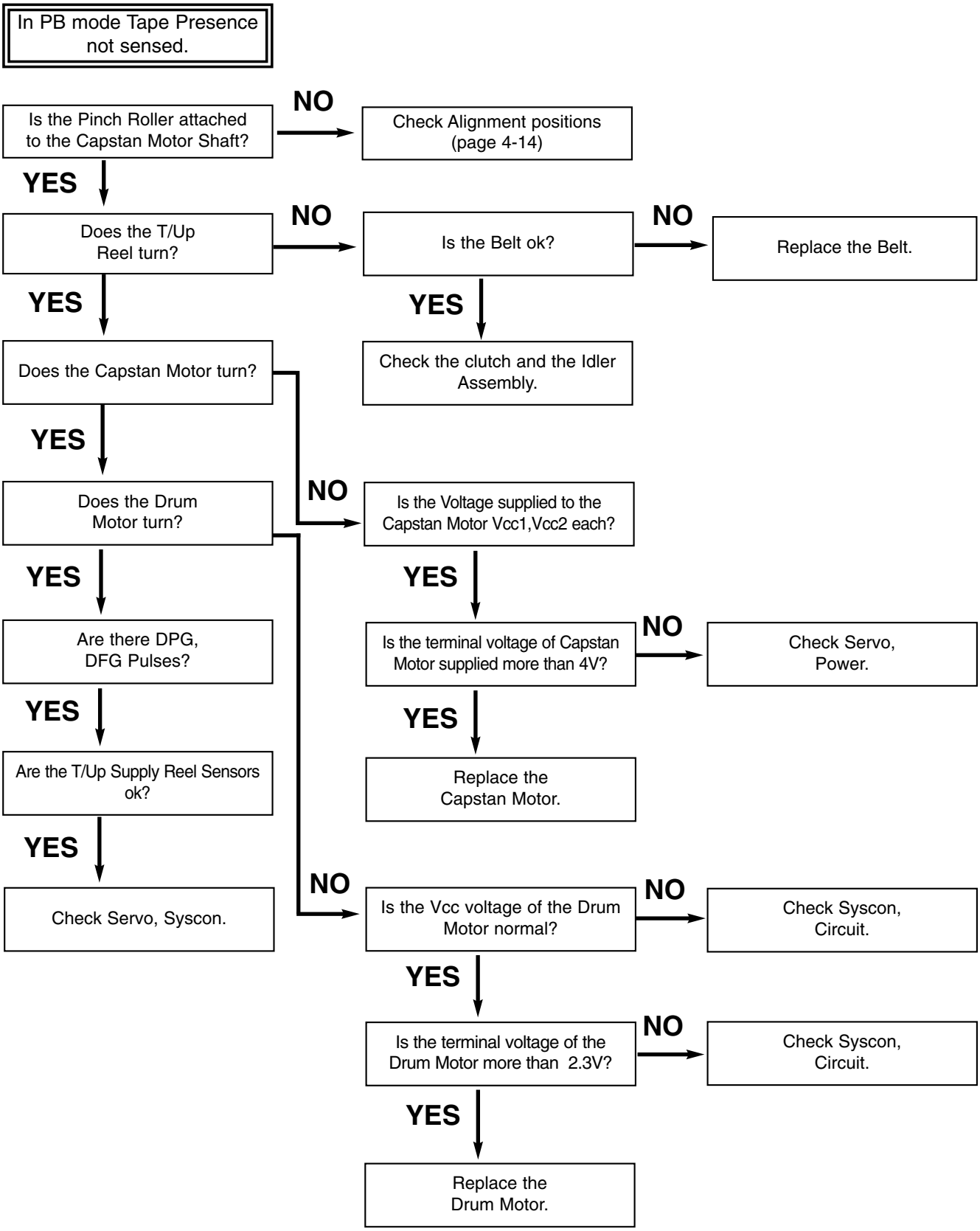
C.


AUTO STOP.
(PLAY/CUE/REV)
In Play/Cue/Rev is the pinch roller in contact with the capstan shaft.
Check aligment positions (page 4-14) Check spring Pinch.
NO
Is the output of DFG, DPG OK?
NO
Replace Drum Motor.
YES
YES
Are there T/up and supply reel pulses.
NO
Check Servo, Syscon.
YES
Check the Syscon, µ-COM.
Replace Reel Sensor.

D.

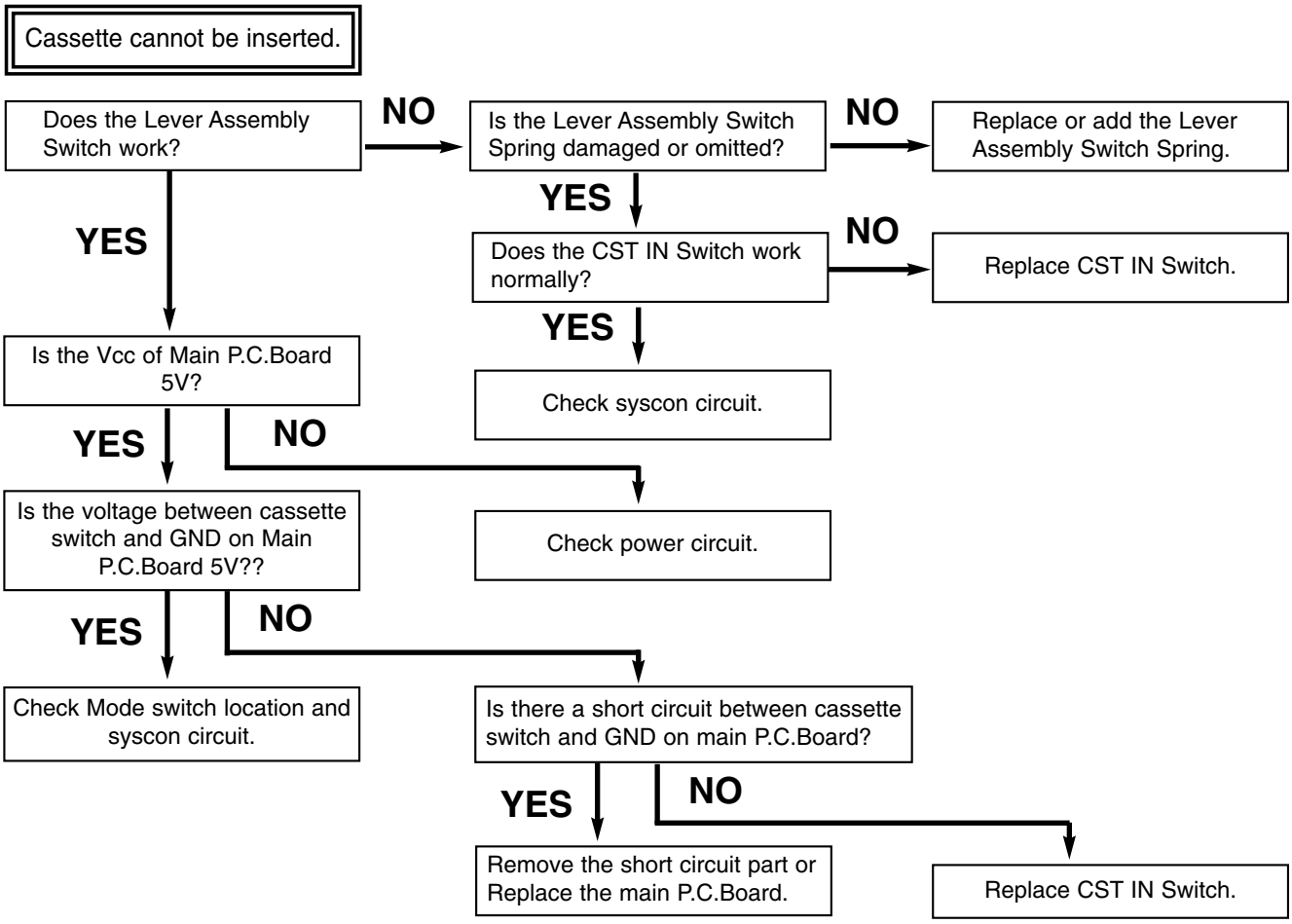

No cassette loading.
Insert the cassette.
YES
Does the lever Assembly S/W work normally.
NO
Check Holder Assembly CST.
YES
Is there variation for CST IN S/W Output?
(In Tape with REC Tab
"L"→"H"→"L")
(In Tape without REC Tab
"L"→"H"→"L"→"H")
NO
Does the CST IN S/W work normally?
NO
Replace CST IN S/W.
YES
YES
Check Syscon Circuit.
NO
Check Syscon Circuit.

E.

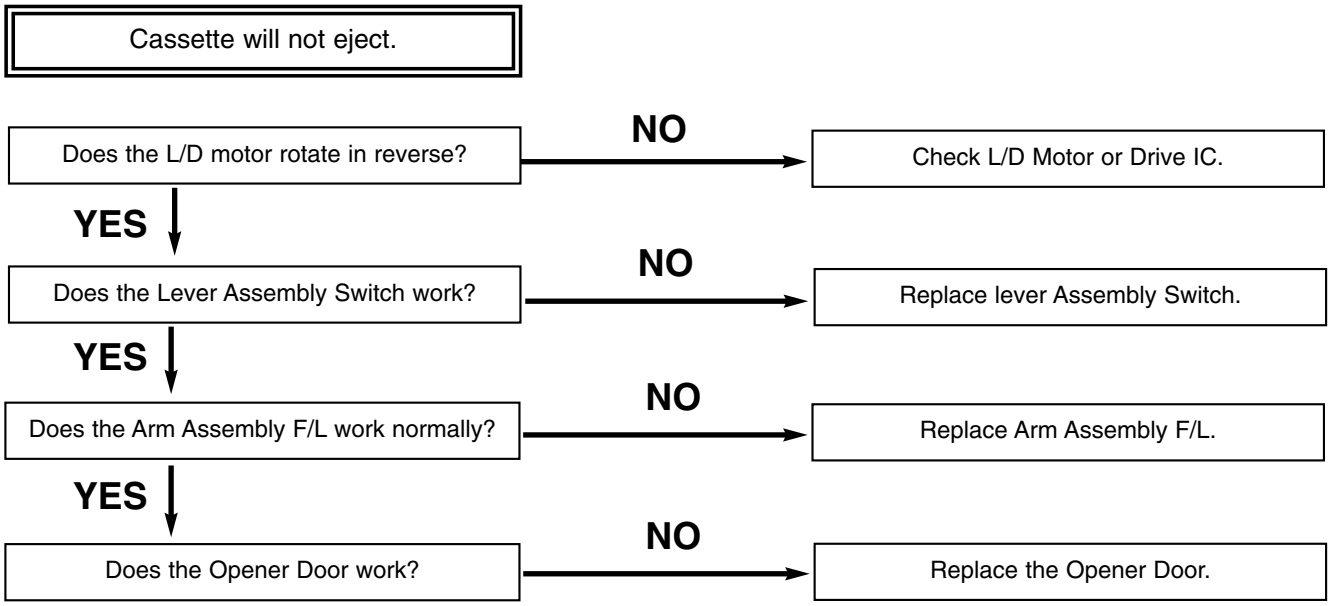

In PB mode Tape Presence not sensed.
Is the Pinch Roller attached to the Capstan Motor Shaft?
NO
Check Alignment positions (page 4-14)
YES
Does the T/Up Reel turn?
NO
Is the Belt ok?
NO
Replace the Belt.
YES
YES
Does the Capstan Motor turn?
Check the clutch and the Idler Assembly.
YES
Does the Drum Motor turn?
NO
Is the Voltage supplied to the Capstan Motor Vcc1,Vcc2 each?
YES
YES
Are there DPG, DFG Pulses?
Is the terminal voltage of Capstan Motor supplied more than 4V?
NO
Check Servo, Power.
YES
YES
Are the T/Up Supply Reel Sensors ok?
Replace the Capstan Motor.
YES
NO
Check Servo, Syscon.
Is the Vcc voltage of the Drum Motor normal?
NO
Check Syscon, Circuit.
YES
Is the terminal voltage of the Drum Motor more than 2.3V?
NO
Check Syscon, Circuit.
YES
Replace the Drum Motor.

2. Front Loading Mechanism

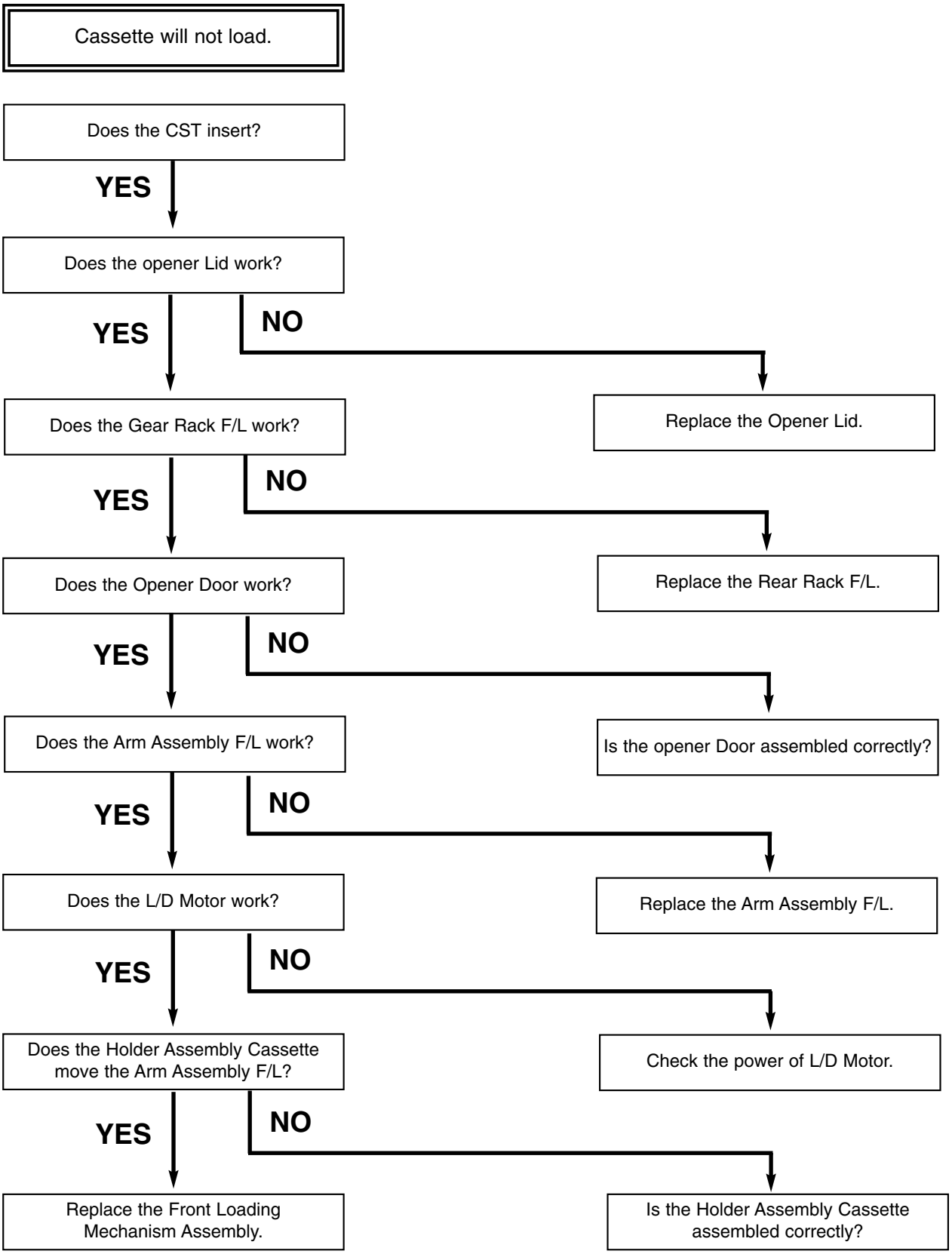
A.


Cassette cannot be inserted.
Does the Lever Assembly Switch work?
NO
Is the Lever Assembly Switch Spring damaged or omitted?
NO
Replace or add the Lever Assembly Switch Spring.
YES
YES
Does the CST IN Switch work normally?
NO
Replace CST IN Switch.
YES
Is the Vcc of Main P.C.Board 5V?
Check syscon circuit.
YES
NO
Is the voltage between cassette switch and GND on Main P.C.Board 5V??
Check power circuit.
YES
NO
Check Mode switch location and syscon circuit.
Is there a short circuit between cassette switch and GND on main P.C.Board?
YES
NO
Remove the short circuit part or Replace the main P.C.Board.
Replace CST IN Switch.

B.

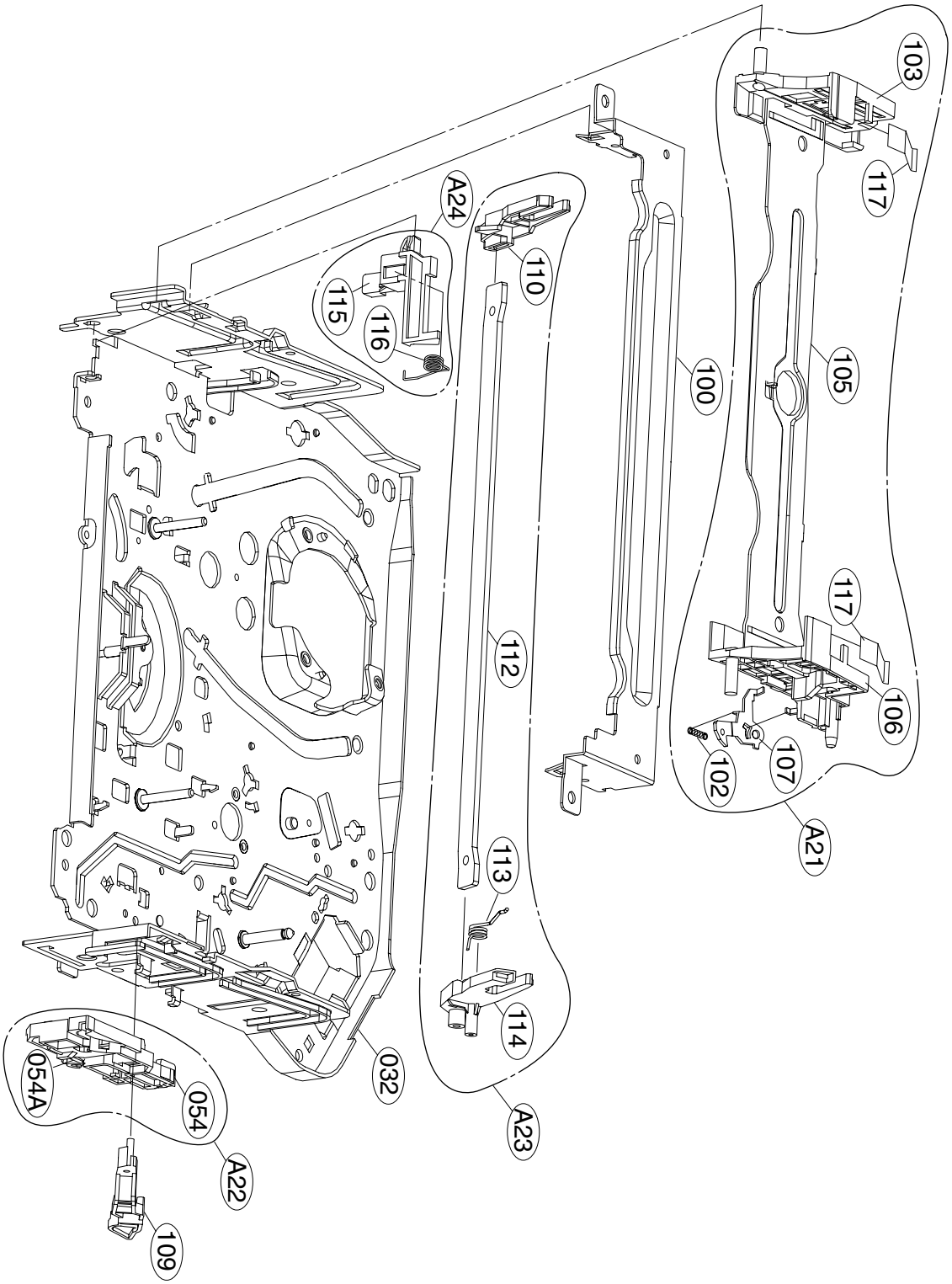


C.


Cassette will not load.
Does the CST insert?
YES
Does the opener Lid work?
YES
NO
Replace the Opener Lid.
Does the Gear Rack F/L work?
YES
NO
Replace the Rear Rack F/L.
Does the Opener Door work?
YES
NO
Is the opener Door assembled correctly?
Does the Arm Assembly F/L work?
YES
NO
Replace the Arm Assembly F/L.
Does the L/D Motor work?
YES
NO
Check the power of L/D Motor.
Does the Holder Assembly Cassette move the Arm Assembly F/L?
YES
NO
Is the Holder Assembly Cassette assembled correctly?
Replace the Front Loading Mechanism Assembly.

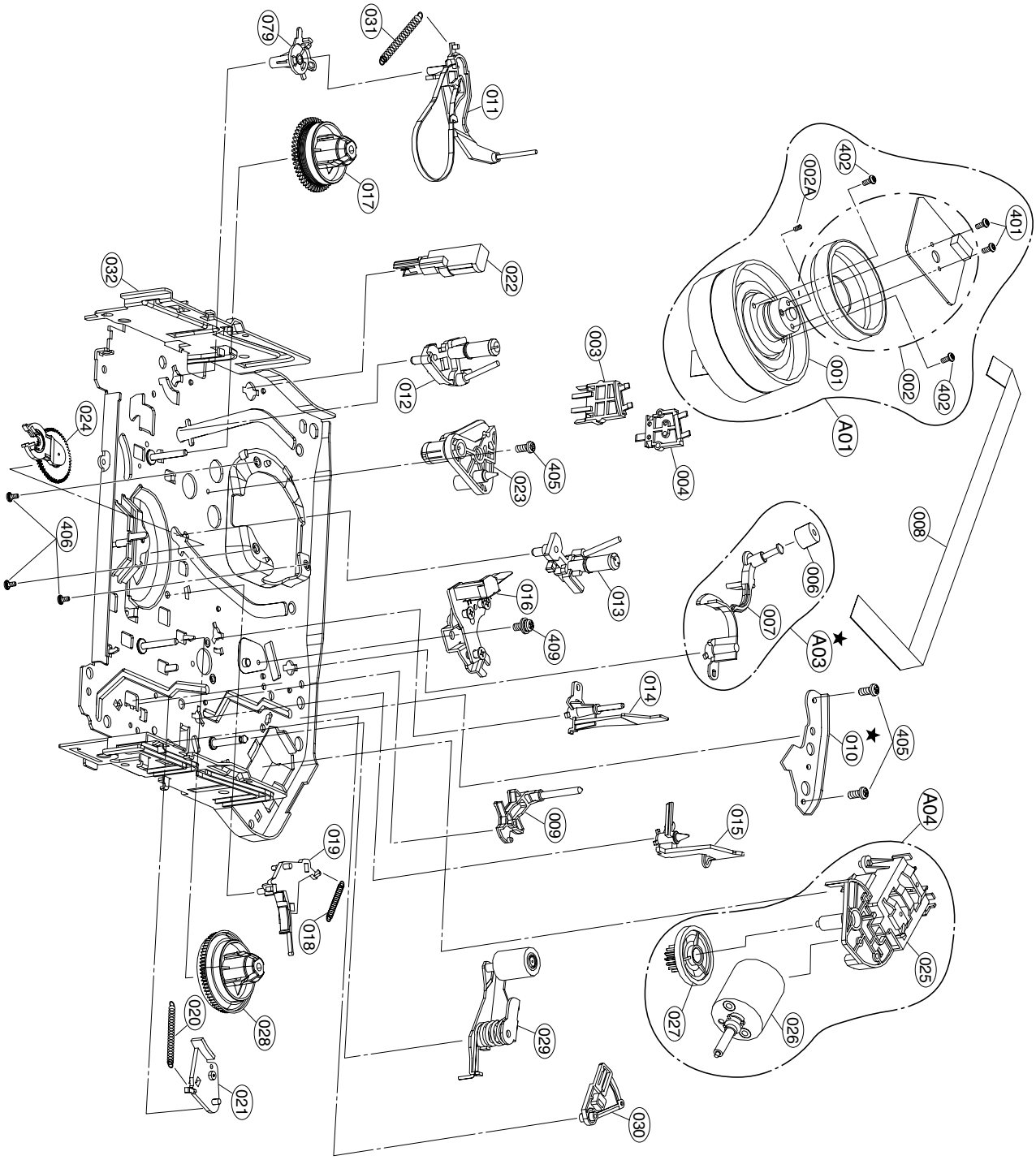
EXPLODED VIEWS

1. Front Loading Mechanism Section

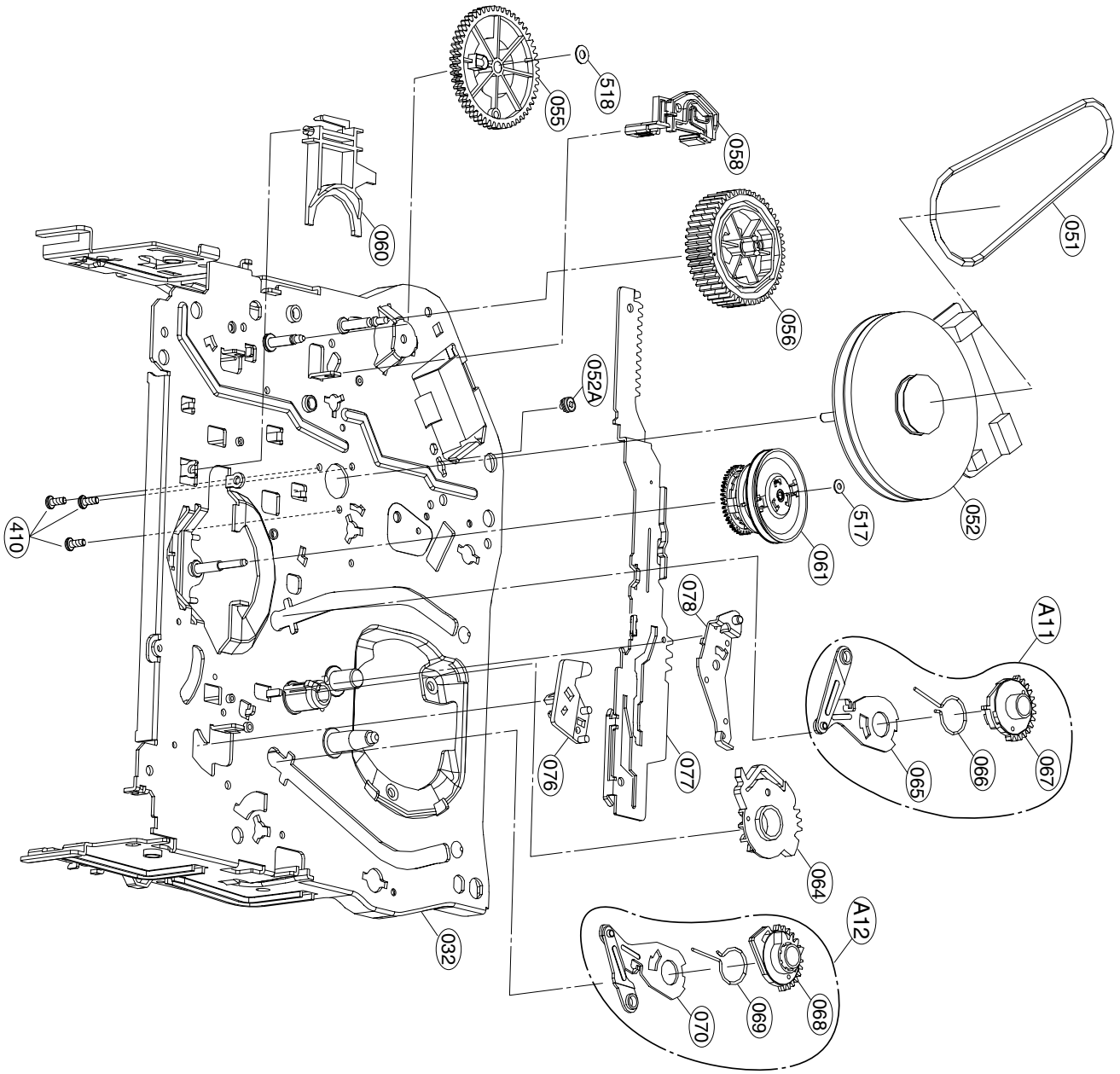


2. Moving Mechanism Section(1)

★ OPTIONAL PART



3. Moving Mechanism Section(2)



SECTION 4 MECHANISM OF DVD PART

SECTION 4 MECHANISM

CONTENTS

DECK MECHANISM PARTS LOCATIONS

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- **Top View(without Tray Disc).....4-1**
- **Bottom View 4-1**

DECK MECHANISM DISASSEMBLY

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1-1-1. Plate Clamp 4-2
1-1-2. Magnet Clamp 4-2
1-1-3. Clamp Upper.....4-2

2. Tray Disc 4-2

3. Base Assembly Sled.....4-3

3-1. Gear Assembly Feed.....4-3
3-2. Gear Assembly Middle.....4-3
3-3. Gear Assembly Rack.....4-3

4. Rubber Rear.....4-3

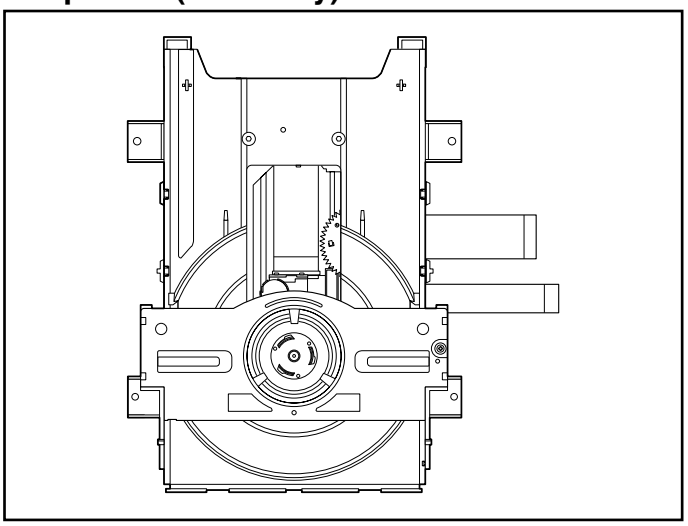
5. Frame Assembly Up/Down.....4-4
6. Belt Loading.....4-4
7. Gear Pulley 4-4
8. Gear Loading 4-4
9. Guide Up/Down.....4-4
10. PWB Assembly Loading.....4-4
11. Base Main.....4-4

EXPLODED VIEW

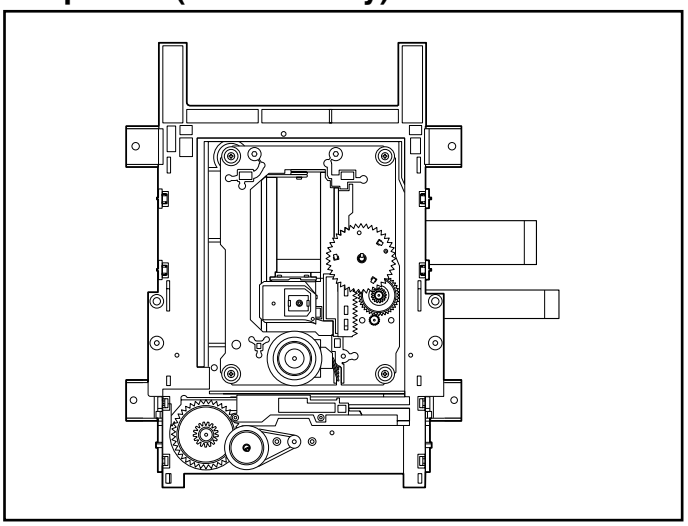
1. Deck Mechanism Exploded View....4-5

DECK MECHANISM PARTS LOCATION

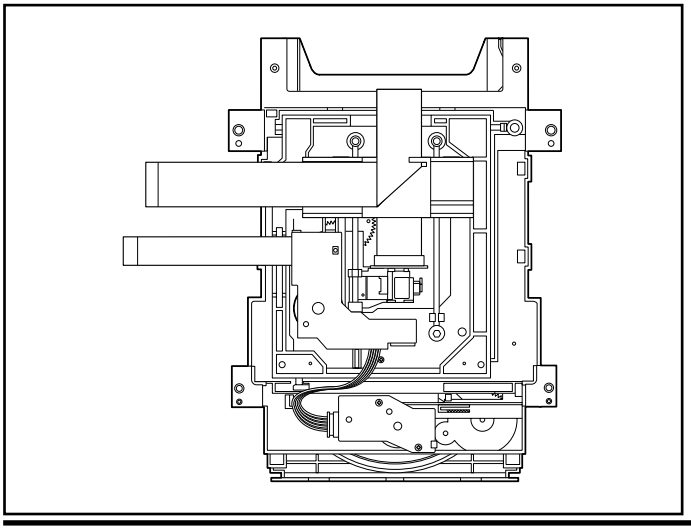
• Top View (With Tray)



• Top View (Without Tray)



• Bottom View



Procedure Starting No.		Parts	Fixing Type	Disassembly	Figure
	1	Holder Clamp	2 Screws, 2 Locking Tabs		4-1
1	2	Clamp Assembly Disc			4-1
1, 2	3	Plate Clamp			4-1
1, 2, 3	4	Magnet Clamp			4-1
1, 2, 3, 4	5	Clamp Upper			4-1
1	6	Tray Disc			4-2
1, 6	7	Base Assembly Sled			4-3
1, 2, 6	8	Gear Assembly Feed	4 Screws, 1 Connector 1 Locking Tabs		4-3
1, 2, 6, 8	9	Gear Middle			4-3
1, 2, 6, 8, 9	10	Gear Assembly Rack	1 Screw		4-3
1, 2, 7	11	Rubber Rear			4-3
1, 2, 7	12	Frame Assembly Up/Down	1 Screw	Bottom	4-4
1, 2	13	Belt Loading	1 Locking Tab		4-4
1, 2 ,13	14	Gear Pulley			4-4
1, 2, 13, 14	15	Gear Loading	1 Locking Tab		4-4
1, 2, 7, 12, 13, 14	16	Guide Up/Down			4-4
1, 2, 13	17	PWB Assembly Loading	1 Locking Tab 1 Hook 2Screw	Bottom	4-4
1, 2, 7, 12, 13, 14, 15, 16, 17	18	Base Main	2 Locking Tabs		4-4

Note

When reassembling, perform the procedure in reverse order.

The “Bottom” on Disassembly column of above Table indicates the part should be disassembled at the Bottom side.

DECK MECHANISM DISASSEMBLY

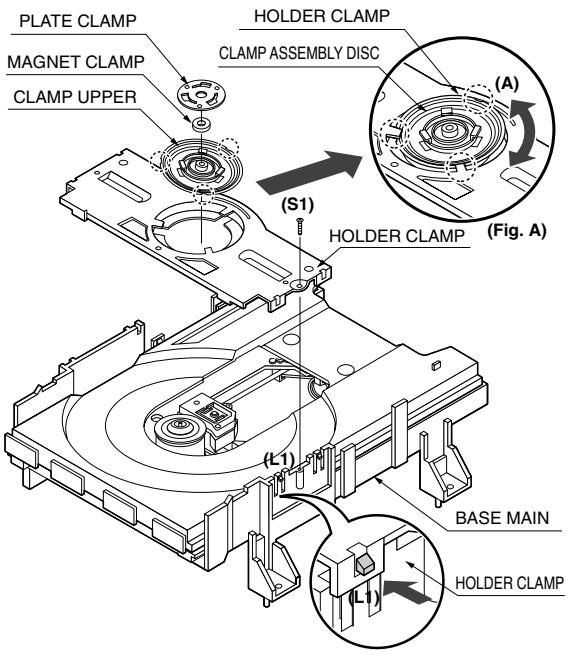


Fig. 4-1

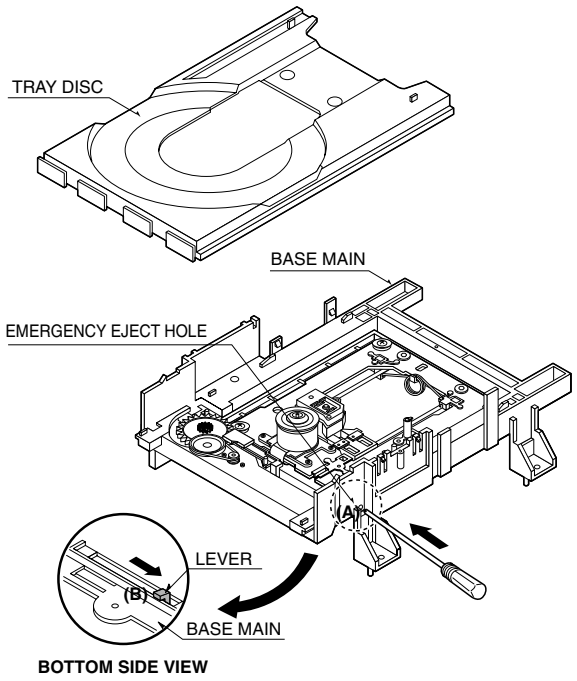


Fig. 4-2

1. Holder Clamp (Fig. 4-1)

1) Release 1 Screws(S1).
2) Unhook 2 Locking Tabs(L1).
3) Lift up the Holder Clamp and then separate it from the Base Main.

1-1. Clamp Assembly Disc

1) Place the Clamp Assembly Disc as Fig. (A)
2) Lift up the Clamp Assembly Disc in direction of arrow(A).
3) Separate the Clamp Assembly Disc from the Holder Clamp.

1-1-1. Plate Clamp

1) Turn the Plate Clamp to counterclockwise direction and then lift up the Plate Clamp.

1-1-2. Magnet Clamp

1-1-3. Clamp Upper

2. Tray Disc (Fig. 4-2)

1) Insert and push a Driver in the emergency eject hole(A) at the right side, or put the Driver on the Lever(B) of the Gear Emergency and pull the Lever(B) in direction of arrow so that the Tray Disc is ejected about 15~20mm.
2) Pull the Tray Disc until it is separated from the Base Main completely.

DECK MECHANISM DISASSEMBLY

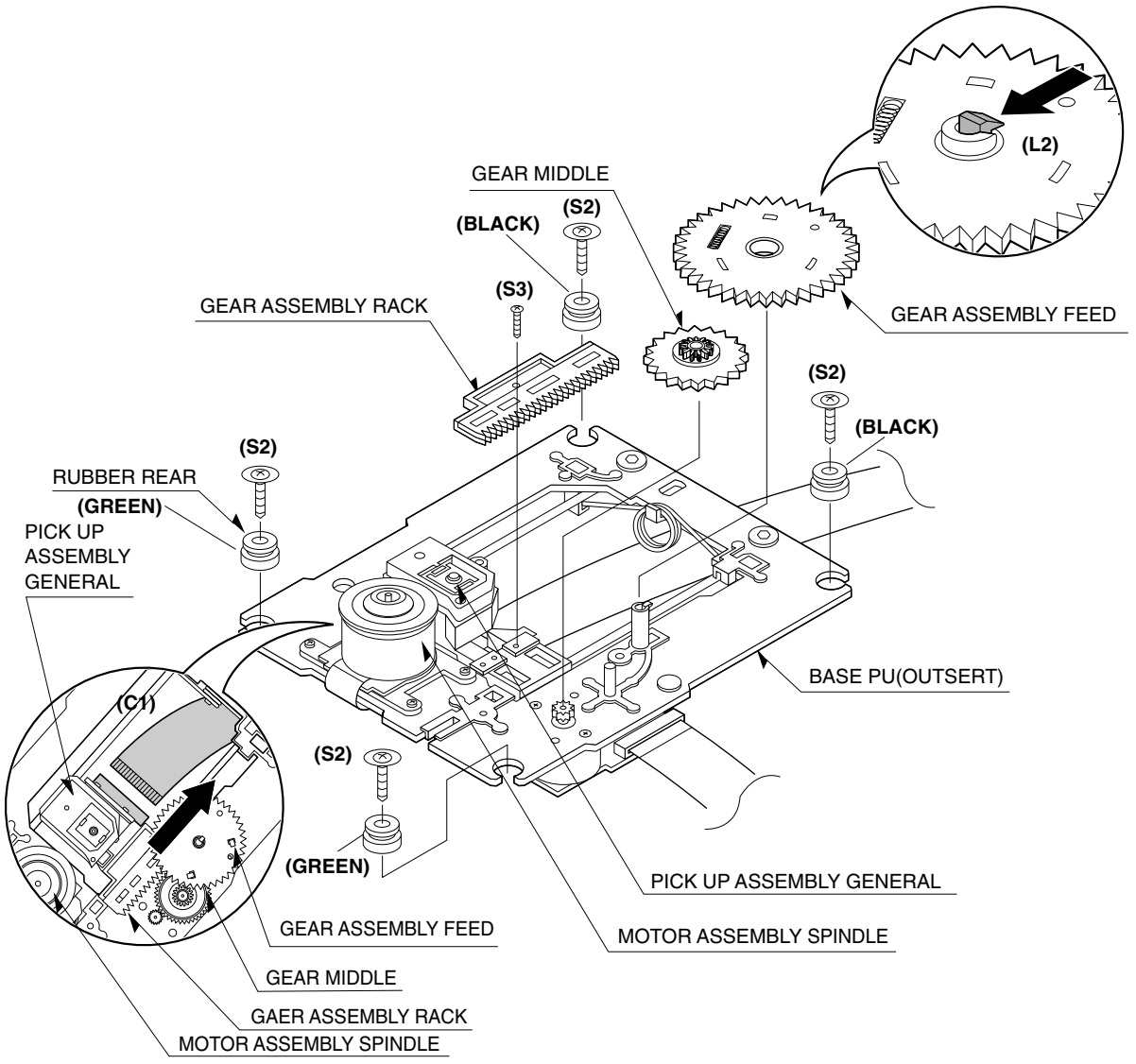


Fig. 4-3

3. Base Assembly Sled (Fig. 4-3)

1) Release 4 Screw(S2).
2) Disconnect the FFC Connector(C1)

3-1. Gear Assembly Feed

1) Unhook the Locking Tab(L2) in direction of arrow.

3-2. Gear Middle

3-3. Gear Assembly Rack

1) Release the Scerw(S3)

4. Rubber Rear (Fig. 4-3)

DECK MECHANISM DISASSEMBLY

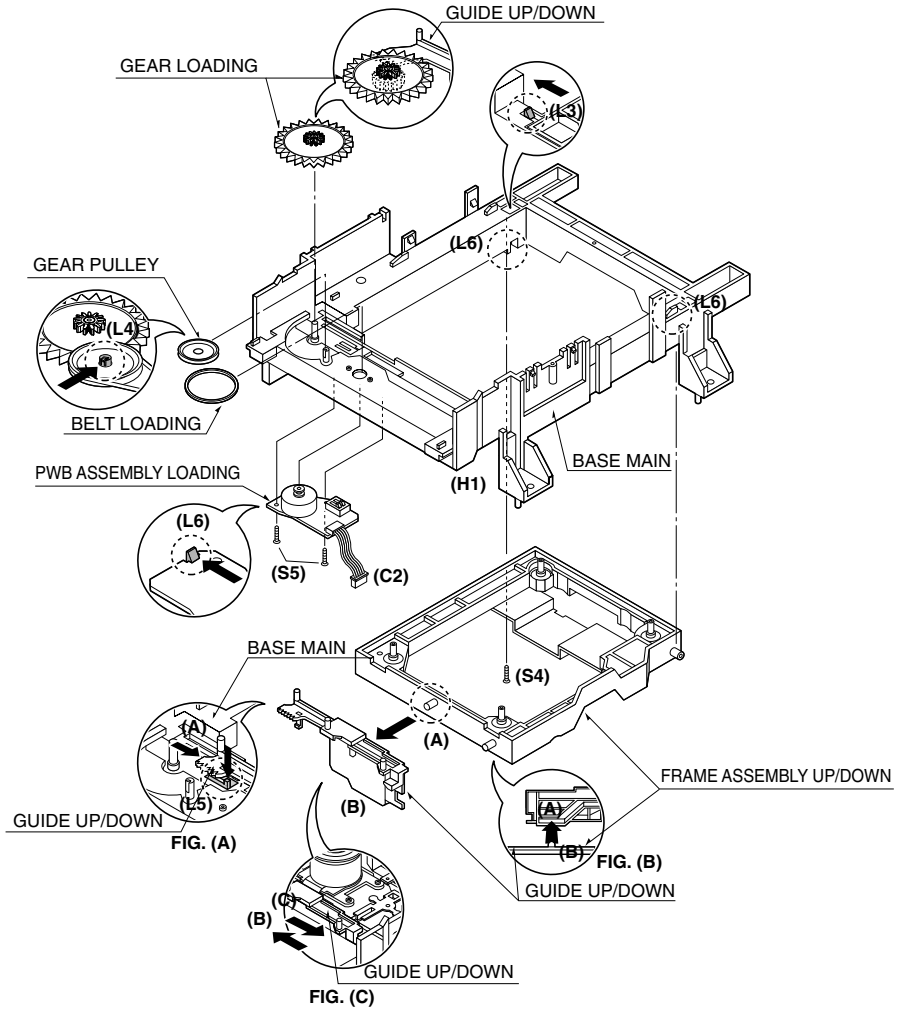


Fig. 4-4

5. Frame Assembly Up/Down

Note

Put the Base Main face down(Bottom Side)

1) Release the Screw(S4)
2) Unlock the Locking Tab(L3) in direction of arrow and then lift up the Frame Assembly Up/Down to separate it from the Base Main.

Note

- When reassembling move the Guide Up/Down in direction of arrow(C) until it is positioned as Fig.(C).
- When reassembling insert (A) portion of the Frame Assembly Up/Down in the (B) portion of the Guide Up/Down as Fig.(B)

6. Belt Loading(Fig. 4-4)

Note

Put the Base Assembly Main on original position(Top Side)

7. Gear pulley (Fig. 4-4)

1) Unlock the Locking Tab(L4) in direction of arrow(B) and then separate the Gear Pulley from the Base Main.

8. Gear Loading (Fig. 4-4)

9. Guide Up/Down (Fig. 4-4)

1) Move the Guide Up/Down in direction of arrow(A) as Fig.(A)
2) Push the Locking Tab(L5) down and then lift up the Guide Up/Down to separate it from the Base Main.

Note

When reassembling place the Guide Up/Down as Fig.(C) and move it in direction arrow(B) until it is locked by the Locking Tab(L5). And confirm the Guide Up/Down as Fig.(A)

10. PWB Assembly Loading

Note

Put the Base Main face down(Bottom Side)

1) Release 2 Screws(S5)
2) Unkool the Loading Motor Connector (C2) from the Hook (H1) on the Base Main.
3) Unlock 2 Locking Tabs(L6) and separate the PWB Assembly Loading from the Base Main.

11. Base Main(Fig. 4-4)

EXPLODED VIEWS

1. Deck Mechanism Exploded View